

DE GRUYTER

NATURE IN THE MIDDLE AGES AND THE EARLY MODERN TIMES

EXPLORATION OF A CRITICAL RELATIONSHIP

Edited by Albrecht Classen



FUNDAMENTALS OF MEDIEVAL
AND EARLY MODERN CULTURE

Nature in the Middle Ages and the Early Modern Times

Fundamentals of Medieval and Early Modern Culture



Edited by
Albrecht Classen and Marilyn Sandidge

Volume 29

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I dedicate this book to my wonderful son, Stephan M. Classen, who is so deeply and admirably committed to striving for the sustainability of our world which our granddaughter Sophie is about to inherit.

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Albrecht Classen

Introduction

Recent data collections by scientists have fully confirmed that the globe is warming up at a dangerous pace, with a myriad of catastrophic consequences for human society and the natural environment. But as scholars, we must approach this topic *sine ira et studio*, hence objectively, not panic-stricken, and with a full awareness of the historical dimension of previous catastrophes. Volcanic eruptions continue to be a major factor impacting the entire globe until the present, at times massively impeding air traffic all over the world, such as the eruptions of Eyjafjallajökull in Iceland between April and June of 2010.¹ A similar series of catastrophic events took place in Indonesia in 1815 when Mount Tambora [Tomboro] erupted, the impact of which was witnessed in the terrible summer of 1816 when a huge cloud of ash covered much of the sky across the world.² We can easily trace a long history of such eruptions, if not explosions, but then also of tsunamis, earthquakes, wildfires, heat waves, excessively rainy seasons, etc., back through the Middle Ages and to antiquity, both in the West and in the East, both in the northern and the south hemispheres. Subsequent human suffering, including famines, heavy losses of life, and the destruction of civilization, has been with us, unfortunately, for time immemorial. This does not mean, however, that the present situation, with human society having entered the Anthropocene (past the Holocene, that is, the current age in which human impact on nature is threatening the natural environment, instead of the other way around, unless we talk about the danger of mutual elimination), is simply to be equated with earlier catastrophic developments.

At the same time, it would be just as erroneous to ignore the continuity of natural processes all over the world that constantly influence human life in negative terms. As cultural historians, it is our task to analyze and discuss also the many different aspects determining the relationship between the natural envi-

1 Clive Oppenheimer, *Eruptions that Shook the World* (Cambridge: Cambridge University Press, 2011); *Encyclopedia of Natural Hazards*, ed. Peter T. Bobrowsky. Encyclopedia of Earth Sciences Series (Dordrecht and New York: Springer, 2013). For an excellent overview, precise details, data concerning the immediate and the long-term after-effects, see https://en.wikipedia.org/wiki/1815_eruption_of_Mount_Tambora (last accessed on Jan. 3, 2023).

2 William K. Klingaman and Nicholas P. Klingaman, *The Year without Summer: 1816 and the Volcano that Darkened the World and Changed History* (New York: St. Martin's Press, 2013).

ronment and human society. Nothing should be viewed in complete isolation. Of course, the opposite also would not work if we relativized all phenomena as we observe them today, shrug our shoulders, and simply move on as if the repetition of earthquakes or tsunamis throughout time would make it unnecessary to care about those events. Fatalism (not stoicism) carries the danger that we abandon our human agency, and thus our moral and ethical obligations to protect nature, as far as that might be possible for us, and our society (also with limited possibilities). But scholars have often opined that narratives about nature are of greater interest than the territory itself.³

Significantly, there are numerous conditions in nature brought about by human folly, laziness, ignorance, or lack of understanding. The case of the Japanese nuclear power station Fukushima Daiichi that was hit and badly damaged by a tsunami on March 11, 2011, would be a clear case in point. Originally situated on a 35-meter bluff off the coast, which would have been a safe height under normal circumstances, the bluff was cut down by 25 meters so that the base of the reactor could be built on solid rock and could also cheaply draw seawater for cooling. Many years before the 2011 disaster, various reports warning about serious risks for the power station in that seismically highly active region were issued but they were all disregarded.⁴ Greed, lack of oversight, political and economic pressure, etc., all contributed to this major disaster that has not yet been adequately addressed until the present moment.

Past human experiences can tell us much about suffering, but also pleasures, when people interact with nature, either voluntarily or involuntarily. One point is very clear, which many of the papers in this volume express explicitly. Nature

³ See, for instance, the famous statement to that effect by Michel Houellebecq, *La carte et le territoire* (Paris: Flammarion, 2010), 82. This finds an even greater, but perhaps simply naive emphasis in the study by Salvatore Liccardo, "Narrating Frontiers of Geographical Imagination: Remembering Alexander the Great in the 'Peutinger Table'," *The Past Through Narratology: New Approaches to Late Antiquity and the Early Middle Ages*, ed. Mateusz Fafinski and Jakob Riemenschneider. Das Mittelalter, Beihefte 18 (Heidelberg: University Publishing, 2022), 143–60; here 160. The article approaches the subject from a cultural-historical perspective that seems to be understandable and reasonable at first sight, but ultimately betrays a profound disrespect of the true force in life, nature. Until we change that imbalance in perception, we will not be able to come to terms with the global crisis we face today. Houellebecq's statement, "LA CARTE EST PLUS INTÉRESSANTE QUE LE TERRITOIRE" (sic), could be easily adapted by racists or imperialists, for instance to argue that the life of the white slave holder is more interesting than the life of the slaves.

⁴ The *Wikipedia* article about Fukushima Daiichi provides all the relevant technical, political, and economic data, which is good enough for our purposes: https://en.wikipedia.org/wiki/Fukushima_Daiichi_Nuclear_Power_Plant (last accessed on Jan. 3, 2024).

represents a power which is unimaginably superior to people and could crush us in an instant, as the story in Genesis of the Great Flood (Genesis 6:9–9:17) recounts. Notwithstanding all our technological advances, this remains true until today, which is highly unsettling but also deeply awe-inspiring considering our lack of true knowledge and understanding of the natural world until today. Even more unsettling is the fact that our wisdom has not kept pace with our technologies, as they too threaten our existence. After all, how far have we come since then in terms of morality, ethics, community, and love for one another? As the biblical author says: “Now the earth was corrupt in God’s sight and was full of violence. God saw how corrupt the earth had become, for all the people on earth had corrupted their ways. So God said to Noah, ‘I am going to put an end to all people, for the earth is filled with violence because of them. I am surely going to destroy both them and the earth’” (Genesis 6:11–13).

Of course, Noah and his family were saved, along with all the animals they took on board their ark, as we know too well: “But I will establish my covenant with you, and you will enter the ark – you and your sons and your wife and your sons’ wives with you. You are to bring into the ark two of all living creatures, male and female, to keep them alive with you. Two of every kind of bird, of every kind of animal and of every kind of creature that moves along the ground will come to you to be kept alive. You are to take every kind of food that is to be eaten and store it away as food for you and for them” (18–21). The rainbow that emerged after the flood had receded then symbolized that God would no longer take revenge upon evil humankind, promising in this covenant that mercy and pity would rule (Genesis 9:13–16). However, whether people have truly improved since then, especially with regard to our attitudes toward nature, seems a rather precarious assumption. In fact, today we seem to be closer to causing our own extinction than ever before, as many ancient flood stories and other myths have long warned us about. Can the rainbow, or the covenant, save us in the future?

But let us leave this doomsday thinking behind for the time being, especially because it depends on so many unpredictable factors not even scientists can take all of them into account when outlining future-oriented perspectives regarding global climate, water supply, food production, clean air, etc.⁵ Instead, we are fully

5 Edward O. Wilson, *The Future of Life* (New York: Alfred F. Knopf, 2003); see also the contributions to *The Future of Life and the Future of our Civilization*, ed. Vladimir Burdyuzha (Dordrecht: Springer Netherlands: Imprint: Springer, 2006). Fortunately (or unfortunately, depending on one’s perspective), recent scholarship in the Humanities and also research in the Natural Sciences have deeply engaged with these existential questions; see now, for instance, Ben Rawlence, *The Treeline: The Last Forest and the Future of Life on Earth* (New York: St. Martin’s Press, 2022).

justified in firmly stating: all cultural studies require that we pay close attention to the relationship between human society and nature, as we can observe it in the Middle Ages and the early modern age, sometimes creating happy spaces (*loci amoeni*; idylls in nature, bucolic pastures, edenic gardens, etc.), but also destroying pristine environments and failing to ensure the sustainability of those it creates.

Human existence is frail and often subject to internal and external threats, from war and social instability to economic scarcity and disease, from the raw powers of catastrophic natural events to new dangers created by our own technologies and overpopulation. However, at least until today, (Mother) nature has been mostly kind to us, providing food, shelter, medicine, and safety for most people. This does not mean at all that there was less deep consciousness about the need to cherish, protect, and interact with nature during antiquity or the modern age; rather, the opposite seems to have been the case.

Each period, each human society, each culture has to cope with nature since all life is predicated on it, whatever we might mean with the somewhat amorphous term, 'nature.' Is there an equilibrium between both sides? Hardly, if ever, as we would have to admit, as my points above and those raised by many of the contributors to this volume about catastrophes clearly underscore. Sometimes, one might even wonder why or how humans have even managed to survive hurricanes, tidal waves, or earthquakes in the past, not to speak of their own violence.

By the same token, considering the negative impact of human society on the environment, nature has always been an overabundant resource, a cornucopia, really, recovering even where humans have committed the worst abuse of the earth. The scars left behind by countless wars from antiquity to the present are mostly either completely gone or hardly visible. Nature has come back and recovered in virtually all territories once ravaged by war (think of the battlefields of WWI); rivers and lakes thought dead from toxic effluents have, once left in peace, recovered, such as the Rhine or Lake Constance, the five Great Lakes in North America, and so forth. The dead zone created by East Germany when they built their horrible border to West Germany in 1961, a very long line of no-man land with mines, fences, towers, guards, etc., disappeared in 1989 and has since then been transformed into the largest national park in Germany, the "Grünes Band," or 'Green Band.'⁶ However, nuclear explosions and accidents seem to have caused almost irreversible damage to nature (and people).

⁶ See, for instance, Reiner Cornelius, *Wartburg – Werra-Rhön: Mensch und Natur am Grünen Band Deutschlands. Vom Todesstreifen zur Lebenslinie* (Niederaula: Auwei-Verlag, 2010); In this book series, he has covered the entire former border line between East and West Germany; cf.

However, there can be easily a tipping point. The current condition with already more than eight billion people here on earth might overstress even the most resilient natural forces, entities, or creatures. It also deserves to be pointed out that nature is not simply the great enemy of human society. On the contrary, countless nature poems, art works, musical compositions, philosophical treatises, gardening activities, agriculture, medical examination of the human body and the appropriate medicine, etc. have confirmed the profound interconnections between humans and nature. We as people live because we are part of nature, use nature for our purposes, and hence ought to be grateful to nature for its generosity.

Hardly any human activity can be imagined which has not been closely associated with nature somehow in one way or the other. Correspondingly, human culture can be directly identified through references to nature. Continuing with our previous volumes in this series, “Fundamentals of Medieval and Early Modern Culture,” here we deal with fundamental issues once again pertaining to the natural environment and humans’ interaction with it. However, as the reader will easily recognize, and which is also the problem in most other studies dealing with this or related topics, nature is a vast, amorphous, and almost incomprehensible concept embracing virtually all and everything, all living creatures, all inanimate objects, space, and even time.

Both the anonymous author of the second- or fourth-century *Physiologus* and Thomas of Cantimpré’s *Liber de natura rerum* (ca. 1225–1244), but then also the many different authors of encyclopedias since the early Middle Ages (beginning with Isidore of Seville’s *Etymologiae*, ca. 620–630), made huge efforts to recognize, identify, and explain all and everything in the natural world. Many times, their analysis was predicated on allegorical readings in accordance with the teachings of the Church Fathers. This approach gave way to a more objective and analytic approach only in the seventeenth century with the rise of modern science and philosophy (Kepler, Galileo, Spinoza, Descartes, etc.). However, the same period witnessed the emergence of various spiritual movements, such as Pietism, early modern mysticism, hermeticism, and Rosicrucianism, all closely intertwined with each other and deeply embedded in nature as the source of all inspirations. In short, the perception of nature through the human lens continued to be multifaceted, multi-leveled and deeply complex concerning the symbolism and allegory of all things natural. Intriguingly, the postmodern world seems to rediscover that perspective once again in its turn away from traditional scientific-mechanistic and mathematical models of world explanations.

also Reiner Cornelius, Gunhild Classen, and Albrecht Classen, *Zur Rhön hinauf* (Niederaula: Auwel-Verlag, 2018).

We can thus certainly agree that the topic of ‘Nature’ is of fundamental importance for all scholars and scientists invested in the investigation of our modern world, and for Medieval and Early Modern Studies in particular. For that reason, I organized the Twenty-First International Symposium dedicated to those two research fields at the University of Arizona, Tucson, April 28–29, 2023, with the specific title “Human and Natural Worlds in the Middle Ages and Early Modern Time: From Ecocriticism to Pre-Modern Anthropology.” As I noted in the call-for-papers for that conference, “The topic has already been discussed from many perspectives, so the challenge consists of developing innovative approaches and discovering more in-depth the relationship of people with their natural environment through close readings of artworks, literary texts, legal documents, medical treatises, etc.”

The symposium attracted twenty-two scholars from Germany, Austria, the Czech Republic, Israel, France, Italy, and the United States, some of whom delivered their talks via Zoom, others in person. One contribution to this volume was the result of a new submission after the symposium.⁷ Subsequently, I began composing my introductory essay, which proved to be a very challenging task for many reasons, some of which I have outlined above. Instead of studying simply what pre-modern people thought about nature, the focus incrementally shifted to the anthropological perspective toward nature, which represents an innovative approach to this topic. This wider perspective constitutes, however, also huge tasks because the focus thus became rather slippery and all-encompassing, as when we hear about early modern cosmology and travels to outer space, or of medical concepts of the human body within the larger context of the micro- and macrocosm. Theologians such as Johann Arndt (1555–1621) derived much inspiration from that old and new worldview when they developed their new spiritualism, particularly within the Lutheran Church.

Other papers examined apocalyptic thinking in Old English and Old Norse literature or the role of gnomes and dwarfs in medieval narratives. Then, the topic of natural disasters, especially flooding, in fourteenth-century Tuscany, and the Black Death mattered as much as the discussion of Jewish proprietors of vineyards in the late Middle Ages. Moreover, the attention also turned to detailed manuals for bee keeping, natural metaphors in mystical Spanish literature, the notion of waste in the early and high Middle Ages, and nature as represented in late medieval travelogues. I could also attract an art historian who looked at Mannerist paintings reflecting the huge power of nature over people. It is also possi-

⁷ For the program, see <https://aclassen.faculty.arizona.edu/international-symposia/program-conference-2023/>.

ble that for philosophers and theologians, the notion of nature proves to be so vast that one can hardly pin it down in one paper or an article.⁸

Not all presentations subsequently translated into full contributions to this volume. Those, however, that are now contained in here, are the result of extensive research, careful and multiple revisions upon my constant prodding, questioning, and adding, then repeated editing, and expansions of the original versions. Despite the great variety, the fundamental concept was the perception and role of nature as seen through the human lens, and this in the Middle Ages and the early modern age up to the late eighteenth century.

Following I will provide brief summaries of each individual paper. Altogether, I believe that this volume perfectly fits into the concept of ‘Fundamentals,’ and hopefully, this book can then be yet another building block in the critical examination of the pre-modern world through a variety of new lenses, with the help of innovative approaches, and by means of a focus on many different sources up until now either neglected or little studied. For the purpose of setting the groundwork for all subsequent specialized articles, I developed a long reflective essay in which I take stock of the relevant research as far as I could identify it, discussed major literary, philosophical, and theological texts in which nature matters critically, and considered numerous art works from the pre-modern period in light of what they have to say about nature. As mentioned above, that had originally been intended as the introduction, but it subsequently grew beyond the limits of an introduction and now stands on its own grounds.

Summaries

The topic of nature has been of central concern for philosophers, theologians, poets, scientists, medical doctors, and artists throughout time. But not just nature; the critical point has always been the relationship between people and the natural environment, a relationship that is currently falling out of sync with us, having entered the life-threatening Anthropocene. In my own first contribution, I examine the wide range of topics regarding nature addressed by a large chorus of voices

⁸ See, for instance, the excellent monograph by Kurt Flasch, *Das philosophische Denken im Mittelalter: Von Augustin zu Machiavelli* (1986; Stuttgart: Philipp Reclam jun., 2013), who has a huge number of references to nature in this one volume, but mostly meaning the ‘nature of things,’ or of ‘people.’ John Marenbon, *Medieval Philosophy: An Historical and Philosophical Introduction* (London and New York: Routledge, 2007), examines nature occasionally, but mostly in a theological context.

from late antiquity to the early modern age, framing all that with reflections on medieval and modern philosophical concepts of what being – philosophically speaking – and matter actually mean (Heidegger). In this process, I am trying to lay the foundation for all subsequent articles, identifying major narratives and artworks where nature, in its own self and in its (involuntary) interaction with humans assumes central importance both in material and in epistemological terms. Both human spirituality and dietary and medical concepts depend deeply on the perception of nature, as countless pre-modern authors determined. But nature does not seem to care about us people; it can be a deadly force (tsunamis, hurricanes, volcanoes, earthquakes, etc.), and it is also the basic source of all human existence (food, shelter, protection). Little wonder that virtually every medieval and early modern poet, and many artists, interacted in one or the other way with nature. Although many modern people tend to assume that the study of nature was rather primitive and even ignorant in the pre-modern period, we can now assert that the major difference to us was, apart from our many more refined research methods and tools, a different way of reading nature, primarily through an allegorical lens.

Understanding the material properties of nature was simply not enough; instead, studying the symbolic, moral, or theological meanings of all plants and animals, but also of stones, water, air, and fire (the four elements) was the ultimate goal of such investigations, which attempted to see the divine essence under the material cloak. Focusing on the depiction of nature in art history and literature, but also in the medical sciences, for instance, allows us to trace the evolution of human perceptions of the environment and the development of philosophical and theological approaches. The focus on nature makes it possible to identify the fundamental epistemological strategies prevalent at a certain time, so we also gain deep insights into the cultural-historical, mental, and emotional components of a given society or of individuals and their audiences.

It seems quite likely that post-modern sciences and pre-modern studies of nature might meet in the middle again by recognizing the metaphorical quality of all nature, beyond its material manifestations. The Priest Amis's laughter about the foolish bishop in Der Stricker's eponymous Middle High German verse narrative (ca. 1220) might signal more than we expected, that is, that critical thinking about nature was already fully in place in the high Middle Ages, and this on the basis of centuries of more allegorical and moral readings of nature.

Unfortunately, the interactions between humans and nature have never been unproblematic, and the current situation looks rather grim with some form of collapse looming on the horizon. But already early medieval poets voiced considerable concern, reflecting their understanding of the deep dangers of abusing na-

ture for its resources, as **Fidel Fajardo-Acosta** points out in his contribution dedicated to the Old English *Beowulf* and its biblical sources.

The coming of an apocalypse was sensed by the anonymous *Beowulf* poet, although he expressed his concerns in literary and figurative terms derived from the most ancient narratives. Already Gilgamesh had to learn the hard lesson that pomposity, selfishness, and arrogance in the face of nature and the gods did not take him anywhere. Beowulf, and other early medieval heroes like him, almost superhuman in shape and power, overcomes his opponents but then dies in the battle against the dragon, apparently because he had not asked for help from his retainers, but, more substantially, because he had angered God by violating the order on which all life, nature, and creation depend.

Beowulf believes the Grendels and the dragon represent the otherworld that he has to overcome, to clear the path, so to speak, and make room for a new culture to emerge from the riots in King Hrothgar's lands, that is, the threat of nature against civilization. The epic and its biblical sources, canonical and pseudepigraphical narratives, stress the reality of the brute forces (cannibalism, murder, fratricide) active in human society and threatening both nature and humanity with strong echoes in Old Testament and pseudepigraphical versions of Genesis, telling of figures and events like Cain's murder of Abel, and the rise of the Nephilim).

The figures of giants take us thus back to the origin of humankind and the creation of nature, which modern humans, the new giants who defy God's laws, threaten in its very existence through their hubristic and destructive actions. Thus Fajardo-Acosta correlates the earliest biblical narratives about fighting and destruction (*1 Enoch*, *Jubilees*) with the imminent apocalypse of our earth as a result of human impact. Beowulf's deeds, killing both Grendels with the sword of the giants, and then killing and being killed by the dragon, much later also serve as ominous reminders of the potential end of human culture in face of the ominous and overwhelming power of nature that always wants to restore its own order and equilibrium to the world. Once the giants and monsters, are gone, the hero has to succumb to his death as well.⁹

9 I have argued somewhat along the same lines in an earlier study; see Albrecht Classen, "The Epistemological Function of Monsters in the Middle Ages: From *The Voyage of Saint Brendan* to *Herzog Ernst*, Marie de France, Marco Polo and John Mandeville. What Would We Be Without Monsters in Past and Present!" *Lo Sguardo: Rivista di filologia* 9.2 (2012): 13–34; online at: https://www.losguardo.net/wp-content/uploads/2015/12/Spazi_del_mostruoso.pdf (last accessed on Jan. 18, 2024); see now id., "Bestiality in the West: Geraldus of Wales's Sexual Fantasies about the Irish Borderlands: A Medieval Colonialist's Worldview," *Global Journal of Cultural Studies* 3 (2024):

There is always a direct and dire correlation between people and their environment, and hence the common reference to God as the ultimate avenger in the biblical accounts. Is the end of humanity inevitable? As Fajardo-Acosta indicates, there is the discriminating King Hrothgar, there are the runes on the ancient sword that need to be read, and there is the heroic poem itself, all indications that a humanist approach to nature and civilization might preserve us after all and save us from an unnatural end.

Unfortunately, but probably quite naturally, when people settle, travel, go hunting, or explore lands, they automatically exert influence on nature, more often than not in negative terms (deforestation, massive slaughter of animals, birds, or fish). The consequences can be observed until today, and this even in the most distant regions of this world. Interestingly, the Nordic countries were not as remote from the rest of the European Continent and the British Isles during the early Middle Ages as we might have assumed. After all, the Vikings (including Norwegian farmers, travelers, exiles, warriors, etc.) reached Greenland, Iceland, and then New Foundland and traveled around all parts of Scandinavia, trading, warring, collecting taxes, ravaging, and exploring from early on, as we can learn, for instance, in various Old Norse *Sagas* (e.g., *Egil's Saga*).

In her contribution, **Marialuisa Caparrini** examines *Ohthere's Voyages*, a narrative interpolation in the late-ninth century Old English translation of Paulus Orosius's *Historiarum adversum Paganos Libri Septem*, which closely follows its source and yet also expands in many specific details. Scholarship has long recognized the high value of this travelogue as to its historical and political information. Caparrini, however, endeavors an ecocritical reading, studying closely what the anonymous author had to say about Ohthere's observations of the various peoples, the fauna, and flora of that northern world. More specifically, she investigates what we can learn here about the negative impact of humans on their natural environment because the devastation of the physical world and its creatures began already at that time and has continued until the present. She does not intend to mitigate the consequences of the Industrial Revolution on the northern landscape by tracing the history of destruction to earlier centuries, but she insists that people's search for land, food, and shelter has had a deep impact already in the early Middle Ages – the same would, of course, apply to the actions by the Romans, Greeks, and Egyptians on the Mediterranean. Although this travelogue, as is the case with virtually all others as well, culled much information from older (learned) sources, the Old English translation provides much detailed information about killing of walrus,

reindeer herding, cutting down of forests, and other aspects with a major negative impact on nature. After all, the traveler, who lived in the very far northern parts of Norway, made his wealth through the natural resources that he exploited almost limitlessly. Through his eyes, we recognize the vast wastelands in those very remote regions, and the complete freedom Ohthere enjoyed in taking from nature whatever he wanted for his own advantages. Ecocritically speaking, then, he was already a major threat to nature, and his account thus becomes an important mirror of the negative relationship between nature and human beings imposing themselves on the virgin lands and their creatures, and this already in the early Middle Ages.¹⁰

The late Middle Ages witnessed the emergence of the intriguing genre of *Books of Hours*, which often contained calendars depicting the individual seasons, month by month (following the model set up by the *regimina duodecim mensium*; cf. also the ancient *Letter from Hippocrates to Caesar*). Much earlier, numerous medical authors had already endeavored to advise their audiences how to live better in harmony with nature by way of observing specific dietary advice, for instance. This finds vivid expression in the thirteenth-century Occitan *Health Advice* in English and *Conselhs occitans de santat* in Occitan, which **Wendy Pfeffer** closely examines in her contribution. Even though medieval people lacked much of our modern understanding of nature here on earth and in outer space, numerous experts understood very well the impact of nature on human existence in physical and spiritual terms and learned how to interact with it also in practical terms.

Famous Hildegard of Bingen (1098–1179) was not only a superior leader of her monastic community; she also composed hymns, wrote down her mystical visions and created visually appealing illustrations of them, and developed a secret language. She was also highly respected for her herbal medicine and dietary understanding, which has led to numerous popular studies today trying to correlate her teachings as to the human body and its nutrition.¹¹ Many other medieval scholars and medical practitioners explored the same issue, often drawing from

10 See, for instance, Vin Nardizzi, “Medieval Ecocriticism,” *postmedieval: A Journal of Medieval Cultural Studies* 4 (2013): 112–23; online at: DOI: 10.1057/pmed.2012.48 (last accessed on Feb. 5, 2024); Alfred Siewers, *Strange Beauty. Ecocritical Approaches to Early Medieval Landscape*. The New Middle Ages (London: Palgrave Macmillan, 2009); *The Oxford Handbook of Ecocriticism*, ed. Greg Garrard (Oxford: Oxford University Press, 2014).

11 See, for example, Heidelore Kluge, *Das große Hildegard-von-Bingen-Buch* (Rastatt: Moewig, 2006). For a solid list of medieval German cookbooks, see Bernhard Dietrich Haage and Wolfgang Wegner, *Deutsche Fachliteratur der Artes in Mittelalter und Früher Neuzeit*. Grundlagen der Germanistik, 43 (Berlin: Erich Schmidt Verlag, 2007), 160–64. For an excellent bibliographical list online, see now <https://gams.uni-graz.at/context:corema> (last accessed on Jan. 22, 2024).

the highly influential *Secreta Secretorum*, commonly in its translation into one of many vernaculars.

The *Diététique provençale* proves to be a practical guide for how to organize one's daily life, how and what to eat and drink, and hence how to correlate one's own existence with the natural conditions. As many other parallel texts throughout medieval Europe, this health guide reflects specifically the availability of individual foods every month and makes concrete recommendations of what to eat/drink and what not.¹² Nature was, in other words, a beneficial guide for people how to maintain and improve their health if they simply adapted to the normal rhythm of all existence and paid attention to the plain instructions provided by nature.

In the Middle Ages, sugar was a luxury item because sugar cane because it grows only in tropical ecosystems. For that reason, honey produced by bees was virtually the only sweetener available. Bees have always enjoyed high respect, both in the pre-modern and the modern world, both for their honey and wax. The famous Cistercian novice master and later prior Caesarius of Heisterbach (ca. 1180–ca. 1240), author of the highly popular collection of miracle tales, the *Dialogus magnus visionum ac miraculorum* (ca. 1219–ca. 1223) also reflected on bees and their great ability to recognize and worship the infinite power of God in one of his tales.¹³ Here we learn of a woman who raises bees but is not very successful in that business because they all die. Someone recommends that she steal a host and place it in one of the hives. Indeed, during the Eucharist, she receives from the priest the host, but she does not swallow it and later removes it to take it home for her bees. The miracle then happens, the insects all swarm to that particular hive because they recognize their Lord: “Vermiculi Creatorem agnoscentes”

12 For a significant medieval compendium with much diverse advice on human health, see *Sex, Aging, & Death in a Medieval Medical Compendium. Trinity College Cambridge MS R.14.52, Its Texts, Language, and Scribe*, ed. M. Teresa Tavormina. 2 vols. (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 2006). See also the contributions to *Health and Healing from the Medieval Garden*, ed. Peter Dendle and Alain Touwaide (2008; Woodbridge, Suffolk: The Boydell Press, 2023).

13 Caesarius of Heisterbach, “Tales Illustrating the Miraculous Power of the Sacraments and the Religious Ideas of the Common People,” *Reading in European History: A Collection of Extracts from the Sources Chosen with the Purpose of Illustrating the Progress of Culture in Western Europe Since the German Invasions*, ed. James Harvey Robinson. Vol. 1 (Boston: Ginn, 1905), 354–55; reproduced in *Medieval Answers to Modern Problems*, ed. Albrecht Classen. 2nd ed. (s.l.: Cognella, 2017), 203–05. None of those editions, however, are reliable; the only recent trustworthy edition is Caesarius von Heisterbach, *Dialogus Miraculorum/Dialog über die Wunder*. Vol. 4, trans. and commentary by Nikolaus Nösges and Horst Schneider. *Fontes Christiani*, 86/4 (Turnhout: Brepols, 2009), Distinction 9, ch. 8, 1764–65.

(1764) and build out of the sweetest wax – the poet might have confused wax with honey – a small, most delicate chapel to worship the host, which they place on a tiny altar inside. Some time later, the woman inspects the hive, discovers the waxen chapel, and becomes very frightened. She goes to her priest and confesses her sin. The latter, along with his parish, visits the site with the hives, they chase the bees away, admire their tiny construction, retrieve the host, and take it back to the church. The narrator concludes his narrative with the comment: “Licet enim mirabilis sit Deus in sanctis suis, mirabilior tamen in his minimis praedicatur” (1764; While the Lord is working miraculously in his saints, He operates even more miraculously in his tiniest creatures).

We cannot claim that Caesarius demonstrated a strong understanding of bees, bees’ wax, and honey, this little miracle story strongly underscores the great respect if not love he showed for these little insects.¹⁴ In a way, he might have been influenced in this respect by St. Francis of Assisi, although the latter had founded the Franciscans, whereas Caesarius was a Dominican.

However, this should not mislead us to think that pre-modern writers were generally ignorant about bees or viewed them only in allegorical terms. Both their honey and their wax were too significant for many aspects in life (candles, hence light, honey as sweetener) not to pay close attention to bees.¹⁵ In Piero de Crescenzi’s chapters on bees in *Ruralia commoda* (1307), as **Nicole Archambeau** illustrates in her contribution, we come across a meticulous and highly detailed treatise on bee keeping, reflecting both a deep understanding of classical and Judeo-Christian teachings on bees and personal experiences. The author offered both pragmatic instruction on how to take care of bees in the best possible manner and then teachings on the moral and allegorical symbolism of bees.

Crescenzi addressed many different types of farmers who could keep bee hives on their land, whether the village poor or especially the owners of villas, or

14 Manfred Misch, *Apis est animal, apis est ecclesia: ein Beitrag zum Verhältnis von Naturkunde und Theologie in spätantiker und mittelalterlicher Literatur*. Europäische Hochschulschriften: Reihe 1, Deutsche Literatur und Germanistik, 107 (Bern and Frankfurt a. M.: Peter Lang, 1974); Kurt Ranke and Josef R. Klíma, “Biene,” *Enzyklopädie des Märchens: Handwörterbuch zur historischen und vergleichenden Erzählforschung*, ed. Kurt Ranke. Vol. 2 (Berlin and New York: Walter de Gruyter, 1979), 296–307, offer a comprehensive overview of the role of the bee both in ancient and in medieval times, and ever since in anthropology, religion, in literature and the visual arts. The most significant concept about the bee was that it reproduced asexually (parthenogenesis), picking up their young ones from blooming flowers.

15 See the entrance on “Bienen” by Ch. Warnke (128–33) and on “Bienen. Naturkunde” by Ch. Hühnemörder (133–34) in *Lexikon des Mittelalters*, vol. II: *Bettlerwesen bis Codex von Valencia* (Munich and Zürich: Artemis Verlag, 1983); Ralph Dutli, *Das Lied vom Honig: eine Kulturgeschichte der Biene* (Göttingen: Wallstein Verlag, 2012).

large estates. His emphasis rests on the question of what people can do to keep bees healthy, not the other way around. Although bees belong to the family of insects, they are admired as highly organized in social groups with a strong hierarchical structure. This even made them look quite similar to human society, being fierce and noble, as Virgil had already formulated it.

Archambeau traces Crescenzi's highly sensitive discussion of bees' nature, properties, needs, and products, and also of the social status and functions of the beekeepers. As much as the treatise appears to be primarily learned, drawing from a rich reservoir of classical and Judeo-Christian sources, it also demonstrates the author's specific familiarity with bees. His apiculture thus proves to be both pragmatic and deeply learned, both realistic and symbolic, a characteristic feature of most approaches to nature in the pre-modern period, such as in the anonymous *Physiologus*, which I have discussed several times in this volume.

Allegory, however, does not mean in this case that an author would not have known many details of the natural world. And it also does not mean that people could simply ignore the needs of bees, or other creatures because in many cases they were and continue to be responsible for the well-being of the natural environment. Good beekeepers had to have a good knowledge of bees' behavior and performance, demands and reactions upon external and internal impacts. We observe, hence, a remarkable attitude toward nature, which required attention, service, and respect. The bees certainly deserved all of that. And until today, maybe even more than ever before, we are rightly concerned with the global problem of the massive death of worker bees, a phenomenon called 'colony collapse disorder' since 2007. People at large seem to have ignored the lessons from the past. But humanity cannot survive without the bees.¹⁶

Following the global thrust of this volume, in **my own contribution (Classen)** I exam first medieval attitudes toward nature, reflecting once again on the *Physiologus* and other treatises as mediums for an allegorical reading. Instead of ridiculing the various authors' attempts to make sense out of the diversity of creatures both in material and in intellectual terms from a modern perspective, we would be better advised to recognize here individual strategies to see behind the physical dimensions and to grasp what the purpose of each individual animal, plant, or insect might be within the divine creation. It was hard enough for the early and high medieval theologians and scientists to come to terms with the universe, seen from an earthly point of view. To recognize God's working behind it all was then a matter

¹⁶ For a massive study of this phenomenon, supported by a large bibliography and data collection, see the online article "Colony collapse disorder," at: https://en.wikipedia.org/wiki/Colony_collapse_disorder#:~:text=Suggested%20causes%20include%20pesticides%3B%20infections,or%20a%20combination%20of%20factors (last accessed on Jan. 22, 2024).

of belief, a task that was actually ineffable, or apophatic (in mystical notions). Allegory thus served a critically important function.

Even vernacular authors of fictional literature, such as Marie de France, revealed that they subscribed to the idea of obscurity; truth is evanescent and evades easily our analytic grip. It always needs to be found behind the screen, that is, the surface of all things, unless a mystical vision breaks the veil (e.g., Hildegard of Bingen, Mechthild of Magdeburg; Catherine of Siena, etc.). We thus face medieval hermeneutics, which were different from ours in some ways, but hermeneutics after all. The starting point and strategies in the process appear to be unfamiliar to us today, but the ultimately desired outcome was, still, the comprehension of the larger universe in micro- and macrocosmic terms.

To probe the issue further, in my study I examine the works especially of John of Garland (his *Integumenta Ovidii*, ca. 1230) and the anonymous *Niederrheinische Orientbericht* (ca. 1350). While the first aimed, similarly as the author of the *Physiologus*, for an allegorical reading of the Ovidian text, the author of the later report demonstrated that it was possible at least for late medieval writers to study nature in its concrete form and shape and thus to lay the foundation for natural-scientific investigations beyond the allegory. John emphasized his desire to open the knot of nature (*integumentum*), which the anonymous author later did in his own, perhaps naïve way. John was not blind to the concrete plants or creatures, but, following the learned tradition, his self-imposed task was to identify the deeper, ethical, and moral meaning, which only a metaphorical and allegorical language could realize.

The genre of bestiaries would have to be kept closely in mind to understand both John's treatise and also the *Niederrheinische Orientbericht*, although there the discussion focuses much more on the specific natural elements, offering at times an almost encyclopedic overview. The author reflects a strong interest in being precise in his descriptions, but then he allows the allegorical mode to enter his discourse after all. The purpose was not only to present the various animals or plants in the Middle East, but to explain their function within the wider universe as created by God. However, scientific writers such as Albertus Magnus and Konrad von Megenberg slowly but increasingly turned to nature as they observed it empirically, which meant that the method of allegorical reading lost in relevance. We today, however, might be on the verge of rediscovering the value of pre-modern interpretations of nature, allowing for a more holistic approach.

Nature is in many ways the result of constant processes, especially among living beings. There is ingestion of food and ejection of waste. In general terms, we could talk about a simple transfer of energy from one level to the other. Even feces constitute food for other creatures, and so forth. Human beings are tragically those who are responsible for an excessive production of waste, as **Warren Tormey** dis-

cusses in his paper, focusing on several major literary works in late medieval English literature, *Wynnere and Wastoure*, Langland's *Piers Plowman*, *Sir Gawain and the Green Knight*, and Chaucer's "The Knight's Tale." While we tend to lament, for good reasons, about the exploding amount of waste most human societies produce today, waste had been a significant problem also in earlier societies, especially when it was brought about by profligacy. Medieval courtly society tended to abuse its privileges particularly regarding the practice of hunting, which was ultimately harmful not only to nature as such, but also to the large majority of peasants, as the anonymous poet of *Wynnere and Wastoure* signals, and as *Sir Gawain and the Green Knight* also reflects when hunting is done only as a sport and game to defeat an opponent.

The poets discussed here do not voice social criticism, they do not call for a reform of society at large, but they express concerns about wasteful lifestyles, especially by the nobility, which would cause not only harm to their poor subjects but would also constitute a moral failure by itself. Armed with this perspective, Tormey then proceeds to offer new readings of *Sir Gawain and the Green Knight* and of Chaucer's "The Knight's Tale" as examples of this habit by aristocrats to overspend and abuse their resources simply out of willfulness and spite. Waste could also find expression in excessive knightliness and courtly entertainment, which some of the poems express quite distinctly. The objection to wastefulness also leads, at least implicitly, to a critique of knightly profligacy and a spendthrift attitude amongst the members of the court. We can easily extend these observations to other courtly narratives across medieval Europe and recognize in some of the extensive descriptions of court festivals with tournaments hidden criticism of waste, abuse, and spoiling.

The impact of the Black Death on the entire world, and this also on most parts of fourteenth-century Europe, was highly dramatic and traumatic. But we have learned by now that climatic changes had weakened many populations already decades before the massive outbreak of that epidemic in Italy in 1347 as a result of the shift from the Medieval Climate Anomaly (warmer period than in previous centuries) to the colder period, the Little Ice Ages (from ca. 1300 to ca. 1850).¹⁷ In his contribution, **Fabian Alfie** examines specifically the great flood af-

17 Again, the online encyclopedia *Wikipedia* offers an excellently researched article on this topic, [https://en.wikipedia.org/wiki/Little_Ice_Age#:~:text=The%20Little%20Ice%20Age%20\(LIA,Matthes%20in%201939](https://en.wikipedia.org/wiki/Little_Ice_Age#:~:text=The%20Little%20Ice%20Age%20(LIA,Matthes%20in%201939) (last accessed on Jan. 24, 2024); for more recent studies, see the contributions to *Le petit âge de glace en Méditerranée: = Little Ice Age in the Mediterranean*, ed. Jean-Michel Carozza, Benoît Devillers, Christophe Morhange, and Nick Marriner. Méditerranée, 122 (Aix-en-Provence: Presses Université de Provence, 2014); *Famines During the "Little Ice Age" (1300–1800): Socionatural Entanglements in Premodern Societies*, ed. Dominik Dollet, Dominik

fecting Florence and the entire region of Tuscany of 1333 and its huge impact on contemporary culture, including literature and the arts. This allows Alfie to trace the many different events – collapsing walls, bridges, buildings – in great detail. Little wonder that contemporary chroniclers and poets intensively reported about and reflected on the disaster and tried to offer religious and moralizing explanations (human sinfulness and God’s wrath punishing people’s failures and shortcomings) and to raise blame on the internecine strife within the city. The rich documentation offered here allows us to get a better understanding of the deep impact of climate change with its resulting natural catastrophes on late medieval society. As Alfie indicates, similar problems affected especially other parts of northern Europe, so it was little wonder that the Black Death had such a huge impact because the entire population was weakened, often suffering from famine and damages to their settlements.

Unfortunately, we today continue to face drastic changes in nature with subsequent catastrophic outcomes, whether we think of tsunamis, earthquakes, volcanic eruptions, wildfires, or droughts. And also today, poets and writers have given voice to those phenomena. It is high time that climatologists, historians, hydrologists, geologists, and other scientists collaborate more closely with scholars in the humanities, especially medievalists and early modernists.

Nature and medicine go hand in hand, with much of our medicine until today made from essences provided by nature. However, sickness, epidemics, infections, and the like also come from nature, so it is understandable that pre-modern physicians considered what medicine they could derive from nature to combat those dangers in a logical balancing act. In her article, **Chiara Benati** examines the phenomenon of the Black Death (1347–1351 and many times later) as discussed by the Strassburg physician Hieronymus Brunschwig in his *Liber pestilentialis de venenis epidimie* from 1500, and other late medieval contemporaries. Of course, we can easily detect a long stream of sources, such as the work by Konrad von Megenberg (defending the miasmatic concept and claiming earthquakes as the culprit for the Black Death having released putrefied air through new cracks in the ground). Scholars were divided as to the original cause of the *pest*, either having come from the stars (celestial theory) or from the earth (natural theory, i.e., environmental theory).

and Maximilian Schuh (Cham: Springer, 2018). The focus, however, often rests on the climatic changes since 1500 or so. But see now Bruce M. S. Campbell, *The Great Transition: Climate, Disease and Society in the Late Medieval World: The 2013 Ellen McArthur Lectures* (Cambridge: Cambridge University Press, 2016); and cf. the contributions to *The Crisis of the Fourteenth Century: Teleconnections Between Environmental and Social Change?* ed. Martin Bausch and Gerrit Jasper Schenk (Berlin and Boston: Walter de Gruyter, 2020).

Benati first discusses the numerous contributions especially to the exploration of the miasma theory in the fifteenth century, noting that the various authors such as Jakob Engelin did not identify a specific social group such as the Jews as responsible for the outbreak of the plague. Then she turns to Heinrich Steinhöwel (1412–1478) and especially Brunswick. The latter was open to various explanations concerning the origin of the plague and did not fixate on just one (celestial or environmental). However, increasingly, these medical authorities accepted that a natural etiology was at work for the rapid outbreak of these epidemics, so they focused more deeply on the natural causes as they imagined them. Of course, neither Konrad von Meigenberg nor Brunswick could truly explain the microbiological conditions, but their efforts were still quite valuable because they resolutely turned toward physical nature on earth where they surmised the cause of the plague to rest.

Throughout time, people have suffered not only from illnesses, but also from severe defects, often leading to some form of disability, at least in physical and also mental terms. In the history of pre-modern literature, disability was commonly disrespected, even laughed at, often in a rather crude way, when we think of the representation of dwarfs, cripples, the blind, or disfigured people.¹⁸ However, for some poets, or probably also artists, disability such as deafness could serve as an intriguing catalyst to connect more intimately with nature and thus to gain deeper insights into the beauty and power of nature, hence of God. This was especially the case with the Spanish author Teresa de Cartagena (ca. 1424/25–1478), whose self-reflections and introspections are the topic of **Connie Scarborough**'s paper in this volume. Teresa composed her *Arboleda de los enfermos* between 1473 and 1474, turning her disability as a deaf person around to focus more intensively on the inner solitude that allowed her to gain a deeper understanding of herself and the natural environment.

As she describes it, she found herself on a metaphorical island where the natural elements turned into vehicles to experience and comprehend God better. This existence in exile made her sensitive to all physical aspects around her, especially the grove, the forlorn site on the unpopulated island, and the trees with their unique bark. As an aside, there might be a worthwhile parallel with the ex-

18 Tory Vandeventer Pearman, *Women and Disability in Medieval Literature*. The New Middle Ages (New York: Palgrave Macmillan, 2010); Albrecht Classen, "The Marginalized Figure of the Dwarf and the Leper: Disability in the World of Tristan and Isolde and Beyond," *Studi medievali* 58.2 (2017): 675–96; see also the contributions to *A Cultural History of Disability in the Middle Ages*, ed. Jonathan Hsy, Tory Vandeventer Pearman, and Joshua R. Eyle (London: Bloomsbury Academic, 2020); cf. also the anthology, *Medieval Disability Sourcebook: Western Europe*, ed. Cameron Hunt McNabb (Brooklyn, NY: punctum books, 2020).

perience described by Christine de Pizan in her *Mutacion de Fortune* (ca. 1403), when her husband drowned in the sea and her ship crashed on the shore, which forced her to rebuild her entire life.

In Teresa's case, she finds herself amongst the island trees that provide her solace in her solitude, and she thus transforms the natural experience into a spiritual one that allowed her to perceive God intimately within the natural environment. In her narrative, the poet reveals a deep understanding of trees and how and when it is advisable to carry out graftings. Both the physical objects and their spiritual interpretation matter centrally in Teresa's *Arboleda*, especially because she began to accept her deafness as a divine grace granting her a desirable distance to human society and the noise of this world. Her physical disability thus triggered her being 'grafted' into a new existence where she could entertain contact with God. Nature thus transforms into a metaphorical world for the author who finds solace and happiness among the trees where, as she realizes, God actually rests.

The *Arboleda* emerged as a literary medium for the poet to appeal to other people who similarly suffer from disabilities, encouraging them to join her in her metaphorical 'convent' and also to nature and embrace it both emotionally and spiritually, and hence to accept their disabilities as an opportunity to get closer to God. To explain her concept of patience with suffering, Teresa specifically embraced tree metaphors and the idea of the island, which to some extent seem to be derived from the Kabbalah and other sources. The infirm or disabled individuals are actually privileged by God because they are more protected from the sins of this world; hence the idealization of the island.

These powerful words aroused a lot of surprise among Teresa's contemporaries and suspicion of plagiarism, which forced her to write a follow-up text, her *Admiración operum Dey*, in which she insisted that God had of course the power to grant a woman like her such a poetic ability. Comparing men with a tree's bark and women with the pith, she identified gender differences as normal and even necessary for the survival of humanity, but she also insisted that women could carry their own, also in spiritual terms. In essence, we could identify Teresa as an intensive nature poet, although she aimed directly for God, whom she discovered in the trees on her isolated and silent island of deafness.

Early modern artists such as Giulio (Pipi) Romano, court artist to the Mantuan Duke Federico II Gonzaga, increasingly developed the techniques of *trompe l'œil* and illusionism aiming not only for aesthetic pleasures, but also for didactic, if not philosophical goals. In her contribution, **Nurit Golan** suggests that the *Camera dei Giganti* (Room of the Giants) in the Palazzo del Te in Mantua, painted by Romano from 1530 to 1533, showing horrifying scenes of earthquakes, volcanoes, and collapsing mountains burying giants in Roman uniform under them, served

to teach specific lessons about nature and people's inability to recognize its true character and power. Almost in analogy to our modern problems with nature that is in grave danger through the human impact (Anthropocene), the frescoes depict the profound danger that can rest in nature, as the giants' destiny illustrates. This was not a grotto for lovers' pleasures, a hidden location for courtly entertainment. The paintings exerted a tremendous shock effect on the viewer and forced them to reexamine their own position here in this world and the precariousness of all human existence. Having been exposed to the frescoes, the individual felt insecure in many different respects, and was expected to realize the instability of life at large, but hence also the instability of all visual perceptions, a typical expression of Mannerist art. After all, the many different elements or figures represented a difficult intellectual task only the well-educated could master; hence, once it dawned upon the viewer what s/he really experienced, a rise of self-awareness of one's inability to apprehend truth, perhaps in the Platonic way, set in. If the giants could be crushed, then the humans could easily be crushed as well. The cave thus served as a kind of artistic medium to destroy the viewer's sense of traditional reality and to initiate a new realization of the instability of our existence here on earth.

Once the viewer had studied the frescoes long enough and the terror had faded, it became clear, as we may assume, that the artwork was deceptive, only a depiction of past horrors. Hence, the presentation of nature in this Mannerist style indicated that our perception of nature could easily mislead us, whereas the true forces of nature remain hidden, erupting only at some times when major powers perceive the need to show their muscles, such as when the giants had to be finished. To be sure, Romano's illusionism created new perspectives of nature and confused the spectator who no longer knew what was true and what was not.

One of the greatest and most intriguing pre-modern notions about the relationship between humanity and nature was the concept of microcosm couched within macrocosm. Even though intellectuals since the twelfth and thirteenth centuries increasingly moved away from an allegorical reading of reality (*Physiologus*), they did not abandon the idea that the human being is part of a divinely ordered universe. Following Plato's important treatise *Timeus*, representatives of the twelfth-century cathedral schools began to explore nature in its concrete conditions. This had huge implications for medical researchers, as **David Tomíček** observes in his study on late medieval Czech medical treatises, especially because they looked for the ideal of harmony connecting the human being with nature here on earth and the universe at large. Already the geometric analysis of the human body signaled the correlation between the physical and the spiritual dimension. Numerous medical authors also identified the presence of the four elements in the human body, a microcosm by itself reflecting the macrocosm. Matyas Philomates (ca. 1550–after

1590) or Heinrich Ranzau (1526–1598), for instance, saw the human body as God's creation and hence as directly correlated with the universe.

In his study, Tomíček analyzes the various elements determining human life according to the opinions of various Czech medical authors and points out the natural and the unnatural factors responsible for people's health, relying deeply on Galen's teaching of the four humors and spiritual forces originating from God. Health was, in other words, the result of the harmonious combination of material and non-material elements. These Czech comments, paralleling those by western medical authors, fundamentally drew from high medieval notions of the relationship between micro- and macrocosm and mirrored the broader discourse within the wider medical profession well into the early modern age, perhaps best represented by the work of the famous Johannes Kopp of Raumenthal (1487–1558). So, it does not come as a surprise that some authors like him utilized the classical metaphor of a lamp or candle representing human life. Only a good balance of internal and external forces would guarantee the smooth burning of the wick, or human growth and existence until late in life, when the internal heat has been consumed.

Quite naturally, the various medical authors had different explanations of the plague in mind, some drawing more from the biblical texts, and some taking into consideration the traditional teachings of the four elements and the bodily fluids and various levels of heat. Already in late antiquity (St. Augustine), longevity was regarded as possible if people observed a healthy diet, and major medieval philosophers such as Roger Bacon followed that thinking quite extensively. However, in the course of time, age has set in, the world is no longer as strong as in antiquity; people have become weak, which leads to plagues, sicknesses, and death.¹⁹ Thus, the evidence of the sixteenth-century Czech writers indicates the continuity of medical regimens and not a closer analysis of human nature and the natural environment. Nevertheless, it might well be that we today could or should revisit those teachings once again, encouraging people to live more in harmony with nature. There is undoubtedly some truth in the global concept of our existence being part of a larger universe.

Many early modern medical authors tried their best to identify the causes of epidemics and resorted to a close analysis of natural conditions for that purpose. In the Czech lands, numerous writers focused on the great need to have available fresh and clean air for a healthy life, as **Filip Hrbek** determines in his close reading

¹⁹ Elizabeth Sears, *The Ages of Man: Medieval Interpretations of the Life Cycle* (Princeton, NJ: Princeton University Press, 1986); John A. Burrow, *The Ages of Man. A Study in Medieval Writing and Thought* (Oxford: Clarendon Press, 1986).

of numerous relevant treatises. Both medical authorities and lay authors embraced more or less the same concepts about the great necessity for people's health to avoid rotten objects and hence bad and smelly air. Already in the early modern age, as the many comments in the various sources indicate, the awareness had grown considerably that certain craftsmen, such as tanners or butchers, for instance, were greatly responsible for emitting bad and hence dangerous odors. Moreover, in this context we also observe the growing concern with handling human fecal matter more effectively, especially within cities. Most of the medical authors in the Czech lands and elsewhere in early modern Europe noted that epidemics were closely correlated with evil air, so working toward establishing good-quality air was considered a fundamental approach to epidemics. In particular, as Hrbek emphasizes, the Czech landscape was considered to be especially healthy, with mountain ranges marking all the borders. Only in the case of mining was there apprehension that the air quality could be diminished. Rotting or putrefying objects (corpses) were increasingly regarded as a danger to human health, which hence also changed the relationship between society and the natural environment. The various city councils issued more and more regulations and orders regarding the hygiene of public and even private spaces, which thus reflected new attitudes toward nature. It was a major resource for all people, but also the source of many dangers to human health. Both human society and the natural world became, since the early modern age, spaces that required control, regulation, and laws, and this in Bohemia as much as in most other European countries.

Both medieval and pre-modern philosophers and medical doctors subscribed to this notion, and it was also a critically important concept in medieval and early modern theology. Various medieval mystical writers such as Hildegard of Bingen and Johannes Tauler had already operated with micro- and macrocosmic images to describe their ineffable experiences with the Godhead. In sixteenth- and seventeenth-century Protestant theology, those gained new favor, as **Thomas Willard** demonstrates through a close reading of the texts by the controversial and later famous highly influential theologian Johann Arndt (1555–1621). For him, God was present in nature, just as Saint Franciscus of Assisi had previously taught. In a way, Arndt was a follower of the medieval mystics and the early modern spiritualists (Jakob Böhme, Valentin Weigel), but he focused, especially in his *Liber Naturae* (the book of nature) (the fourth part of his comprehensive *Vier Bücher vom wahren Christentum*, 1610), on the interrelationship between human beings and God's creation, nature, where the mystical *unio mystica* was possible.

However, Arndt maintained his orthodox adherence to the Lutheran theology, although he insisted that God's spirit could be found also and critically in the natural world. A pious and simple life predicated on the scriptures constituted ideals for him. The human soul was the receiver of the divine inspiration, and the

faithful only had to search within themselves to discover God. At the same time, God manifested Himself in nature, so, according to Arndt, the Christian was supposed to accept spiritual introspection ('imagination') and external searches for God in the physical world of nature.

These new theological approaches by Arndt made him to the grandfather of German Pietism, and behind that we can detect elements of Paracelsism. The true Christian, so Arndt assumed, could discover God only through a thorough examination of one's own soul and of God's natural creation in its specifically physical dimensions. Willard goes so far as to suggest that contemporary spiritualists who do not want to align with any specific Church could find their deep inspirations in Arndt's teachings insofar as Spiritualism appears to be strongly on a new upswing in the western world.

However, what was nature and what was it supposed to be in poets' view? Did God create a perfect world which then, in the course of time, deteriorated, or was damaged by people? How does one even perceive nature, and whose task is it to discuss nature for what purposes? As **John Pizer** argues in his contribution, according to the famous German Baroque poet Martin Opitz (1597–1639), poets had the task of projecting an ideal nature and to reveal its absolute beauty through their own works. In direct opposition to the medieval and early modern concepts of nature being a medium for allegorization, which hence allows for a better reading of God (*Physiologus*), Opitz suggested, which then became highly influential in the following centuries, that poetry was to idealize and thus imitate nature.

In his his didactic poem *Vesuvius: Poema Germanicum* (1633), Opitz focused on the phenomenon of the volcanic eruption (1631) to illustrate the entanglement of allegorization and sublimation with the goal of retrieving the ideal notion of nature as divinely conceived. Poets were supposed to present nature in its essence, and not as it appeared to the naked eye, which would hence entail that poems would function as mirror of emotional or idealistic conditions, whether terrifying or soothing. In other words, for Opitz, and many of his later followers, the reflection on the basic forces of nature contributed to an educational process within the reader. Since human perception of the material dimension was imperfect, the poetic discourse allowed for a deeper understanding of the true character of natural things as created by God. But allegory was no longer good enough for that epistemological process, and even poetry might not have the ability to address this task properly because the deeper truth seems ineffable.

Significantly, major eighteenth-century writers such as Gottsched and Batteaux resorted to Opitz's arguments and reflected thus deeply on the relationship between nature and poetry, i.e., on the relevance of the literary discourse for the critical perception of nature as the only legitimate reason for poetry itself. But

only through Herder's subsequent contributions, did Opitz's concept of nature as the foundation for all poetic verse regain its deep impact on German literature, hence on *Sturm und Drang*, Romanticism, and also Classicism.

As Pizer subsequently points out, as much as Opitz aimed for an idealization of nature, he also turned toward a more realistic description of nature's forces, such as the eruption of Mount Vesuvius in 1631, which he read as God's wrath directed against people so terribly involved in the Thirty Years' War. Opitz's poem represents, as he argues, a transitory stage between late medieval and Baroque concepts of nature as static reflecting God's creation and the modern, scientific concept embraced by Enlightenment thinkers that nature was constantly in flux and transformation. Revealing a certain degree of contradiction, Opitz tried to reject allegorization and yet at the same time accepted that the volcanic eruption had to be read as God's warning message to humankind. So, Opitz's poem reflects, inspired by Seneca, both admiration and awe for nature and terror concerning its devastating forces sometimes launched by God against people as punishment for their sinfulness.

Although western literature at least since the eighteenth century has been influenced by the notion of Orientalism as defined by Edward Said,²⁰ this does not mean that all European travellers in India, for instance, were limited in their perception of that foreign world by an Orientalizing lens. In fact, there are major reports about India and various parts of that country composed by European authors who made serious efforts to describe the local nature and the social system to the best of their abilities. Subjective, personal perspectives have always been at place, and this until today, but when we consider the letters composed by the French medical doctor François Bernier (1620–1688), we are presented with a remarkable realistic and respectful perspective. In her study, **Pascal Barthe** investigates particularly his reports about the voyage of the Mughal court under Aurangzeb (1618–1707, reigning since 1658; he was the sixth Mughal emperor) toward Kashmir, which appeared both to him and the throng of other members of the court as a huge relief from the heat in the subtropical weather of northern India. Bernier's published letters gained great notoriety and mirrored in highly impressive terms the suffering of all the people in the ruler's train from the beating of the sun and the impression of the Kashmir valley that appeared like a paradise here on earth.

²⁰ Edward Said, *Orientalism* (1978; New York: Vintage Books). He initiated a huge scholarly debate and has exerted deep influence on contemporary literary research, which has impacted also pre-modern studies.

Through his reflections, Bernier compared and contrasted the Indian landscapes with those in France, and he also commented on the different religious practices and political system under the Mughal ruler. In particular, he was fascinated by the habit of hunting, a great pleasure for the Indian nobles and their lord.²¹ However, all the splendor of the court and the travel group would have amounted to nothing if the leaders would not have paid greatest attention to water for drinking and cleaning. Hence, Bernier's letters abound with comments on water quality, thirst, and the great relief once a good water source had been found that provided relief from the brutal heat in Punjab and elsewhere. Both for this French observer and the Indian courtiers and their men, the bodies of water in Kashmir, along with the gardens, fields, and forests appeared like Eden here on earth. For Bernier, Kashmir was the perfect combination of Europe and Asia, so he responded also with enthusiasm to the Indian poets who were called in to the visiting court.

Aurangzeb did not only desire to leave behind the summer heat, he also endeavored with this regular trips to Kashmir to affirm his thaumaturgic authority and his role as the leader of a huge empire. Traveling to that magical valley in the Himalayas carried huge symbolic significance, so nature and politics merged here almost smoothly, as Bernier observed in his letters. Both Kashmiri craftsmanship and poetry, garden architecture, and philosophy contributed to establishing that valley as highly iconic of the Mughal empire. It would be rather problematic to associate Bernier with Orientalism, as much as he admired this glorious valley and the cultural development there.²²

Finally, the focus turns from this world to outer space where many pre-modern or early modern authors, scientists, philosophers, and theologians assumed life to exist. **Reinhold Münster** examines a wide range of literary, philosophical, and scientific texts which we might daringly call early examples of science fiction. Surprisingly early, various writers conceived of human-like societies on the moon or on one of the planets in our solar system, whom the fictional travellers visit. One key question was commonly of how one could communicate with the aliens, but there were always unusual ways of achieving that goal. Münster probes in particular how these early modern writers reflected on the biospheres as they existed in the cosmic space, hence on the fauna and flora, but also, and perhaps predominantly, on the foreign peoples, which adds a significant anthropological dimension to the investigation of nature we all pursue in this volume.

²¹ There are striking parallels with the hunting customs at the Mamluk court in Cairo, as described by the anonymous author of the *Niederrheinische Orientbericht*; see my contribution to this volume, and the English translation, forthcoming with Boydell & Brewer.

²² I want to point out a remarkable analogy to the famous utopian novel by James Hilton, *Lost Horizon* (1933), although it seems rather unlikely that Hilton might have read Bernier's letters.

Intriguingly, ancient philosophers such as Plato and Aristotle had already paved the way for those intellectual inquiries, and they exerted considerable influence on those authors and philosophers from the sixteenth to the eighteenth-century, who were deeply intrigued by concepts of life on the moon and other planets. The many new scientific discoveries at that time had a great impact on philosophical, theological, and literary thinking about existence in outer space where, as individual writers tended to believe, other human-like creatures, animals, and plants existed. To understand nature, hence, requires taking into consideration the anthropological aspect as well because we have no other epistemological lens to study our or other worlds.

As Münster points out, these early modern writers, influenced by the new scientific discoveries, took on the position, as Bernard Le Bovier de Fontenelle did above all, that there were infinite options for nature to develop all kinds of worlds but from the same basic material. Even Voltaire and Immanuel Kant agreed with his argument and explored it further in philosophical terms, considering the emergence of reason among the inhabitants of other planets. Moreover, famous spiritualists such as Emanuel Swedenborg embraced that notion and applied it to the idea that there must be life where there are earthly bodies, either humans or animals, plants or birds. However, already at that early period, most thinkers assumed that those tended to have very different forms and shapes than humans, and hence also different languages. In light of that, we would have to disagree strongly with Max Weber's theory of the disenchantment of the early modern world, which was true only partially. Science fiction, so to speak, responded strongly to the new scientific discoveries and created new fantasies about foreign worlds.

The volume is rounded off with a study on the folkloric figure of Perchta, best known in the German-speaking lands, who represents, from the Middle Ages until today, the seasons of nature, fertility, life and death, and ineffable forces of and in nature. **William Mahan** examines the tradition of Perchta in a variety of literary, artistic, historical, and anthropological contexts, an uncanny though now often humorized figure who represents ancient and medieval notions of natural powers people are subject to. As much as the Church has fought against this myth, it continues to be with us until today, enjoyed by young and old as part of folk cultures and rituals typical of the winter season, especially in the Alpine regions of Austria, Germany, and Switzerland.

Drawing from Maurice Merleau-Ponty's notion of a "world of perception," which was influenced by Jakob Johann von Uexküll's concepts, Mahan situates this benevolent and yet also threatening figure within human imagination about nature that remains a mysterious phenomenon even today. While Perchta is characteristic of Germanic cultures, similar female goddesses are known from other parts of the world, such as Madam Pele (or Tūtū Pele) in Hawai'i. There are also indirect connections with nixies such as Melusine, Undine, Frau Holle/Holda, and other mythi-

cal female figures, popular both in the Middle Ages and once again since the Romantic period. Nature and fertility thus prove to be intimately tied in with each other, as reflected in many ‘pagan’ religions and traditions throughout time, and Mahan suggests that we might be able to determine the origin of Perchta and other characters in the by now extinct ‘aurochs’ as an animal of enormous strength, power, and fertility. Moreover, he traces many other lines of reception through medieval German or Icelandic literature, taking us from the earliest Middle Ages to the modern age. As much as members of the Church worked hard to repress her culture and other ‘pagan’ rituals or figures, Perchta and her sisters have survived all those efforts, and they might even enjoy a certain degree of popularity today, perhaps as the result of a counter-movement to Christian colonization strategies to repress other religions. Perchta represents, in other words, the deep forces of nature pagan cultures have always been profoundly familiar with, until today.

In short, as a conclusion both of this introduction and as a hopefully concise reflection on the essential issues of this volume, the notion of nature can be identified as a critical benchmark for epistemology, but then also literature, theology, medicine, music, and the visual arts. People have always looked out to nature and conceived many different ideas about what they witnessed there, or far away in outer space, and they also had to learn, and this until today, that nature is a huge challenge for all of us, in material, spiritual, aesthetic, ethical, medical, scientific, and literary terms. We are part of nature and yet tend to abuse it in many different ways. The pre-modern world did not operate much better in that regard, but there seems to have been considerably more respect of and for nature as a mighty force humanity can only hope that it will be kind to us most of the time.

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Albrecht Classen

Nature and Human Society in the Pre-Modern World

The Physical Reality within the Global Context: Medicine,
Philosophy, Literature, Science, and the Arts

Abstract: This study will demonstrate that already the Middle Ages knew of an intensive discourse on nature which was viewed either concretely in material terms or symbolically and allegorically in the religious, literary-historical, and philosophical context. That discourse never came to a stop, so it is impossible to limit ourselves to a small set of individual voices addressing nature. Insofar as we are facing here a true discourse, with many different speakers involved (philosophers, theologians, authors, artists, composers), this introductory article can only serve as a productive ‘Pandora’s Box,’ opening a large variety of perspectives toward people’s lives and their interaction with the physical environment. Undoubtedly, every social class, every gender group, age group, minority group, professional group, etc., viewed, targeted, or embraced nature in different ways, living with and through nature. Hence, the hope here can only be to be as inclusive as possible, with the full understanding that completion or exhaustiveness will be impossible. What matters centrally is thus the identification of the broader discourse on nature as it existed already in the pre-modern world, involving philosophers, theologians, poets, medical doctors, rulers, and artists. The purpose of this article is hence to lay the foundation for a fundamental understanding of that discourse, taking into consideration some of the major voices reflecting both on nature and human society in the pre-modern world.

Keywords: Nature in the Middle Ages, Holocene, Anthropocene, medieval and early modern philosophy, pre-modern theology, pre-modern literature, pre-modern art history, nature hermeneutics

Introduction

The initial question with which I want to introduce this volume might sound curious and perplexing, and maybe even absurd in the first place.¹ Did nature not exist in the pre-modern world? Or, if formulated differently, did people in the Middle Ages and early modern times understand nature in a realistic, concrete way, as we seem to do today or did they interpret it only in allegorical or symbolic terms to do justice to pre-Christian and then Christian teachings? Of course, nature existed then as it has always existed since Genesis, or, in scientific terms, since the Big Bang. Countless pre-modern writers engaged intensively with nature in its physical and spiritual form, discussing the geophysical world, plants, animals, weather, climate, the seasons, the people, gardens, and also imaginary creature.² Just to mention an undisputable fact, the material dimension is the physical foundation of all living creatures. Or: Nature is the material condition of all being and beings, sentient or not, as Martin Heidegger (1889–1976) already formulated in many of his critical reflections on the environment and the nature of all beings and being as such.³

As David E. Cooper observes, according to Heidegger, human society today has divorced itself from nature as a material entity, making it subservient to society's needs, instead of recognizing it as an entity by itself that deserves full respect as a partner: "Nature as it displays itself to the spectator must already have displayed itself in a quite different mode for there to be anything"⁴ (2005). The traditional

1 Originally, I had intended this study as the introduction to the volume, but the topic proved to be so diverse, so complex, and so relevant for many different scholars that I decided to transform this into an independent contribution and to write a new but much shorter introduction. Here I combine theoretical reflections, historiographical aspects, literary-historical and art-historical data to gain a better understanding of the fundamental topic of nature in its relationship with human life from the early Middle Ages to the early modern age.

2 *The Marvels of the World: An Anthology of Nature Writing Before 1700*, ed. Rebecca Bushnell. Penn Studies in Landscape Architecture (Philadelphia, PA: University of Pennsylvania Press, 2021).

3 Andreas Luckner, *Heidegger und das Denken der Technik*. Edition panta rei (Bielefeld: transcript, 2008); see also the contributions to *Kritische Theorie der Technik und der Natur*, ed. Gernot Böhme (Munich: Wilhelm Fink, 2003).

4 David E. Cooper, "Heidegger on Nature," *Environmental Values* 14 (2005): 339–51; here 342. He notes, for instance, that according to Heidegger, the natural sciences do nothing but describe nature, but they do not comprehend it in its very essence and rationality (340). In a way, rejecting the Cartesian worldview from the seventeenth century, Heidegger claims that the sciences have taken up a false position regarding nature, being parasitic and removed, wrongly assuming that nature is just a material dimension clearly separated from human life (341). See also Min Seol, *Das Ansichsein der Natur in der Weltoffenheit bei Martin Heidegger*. Epistemata: Reihe Philoso-

treatment of nature as a resource for human needs exclusively simply blinds the human spectator to the natural world which thereby falsely appears as nothing but material and dead. However, Heidegger argued that “It is only because of the wonder and awe that nature qua physis inspires – because of a vision of nature as something that ‘assails and enthralls’ – that enquiry into the natural world, the determination to understand it and explain its workings, became a possibility for human beings” (343). The true ‘life-world’ would become perceptible to human beings only when their ordinary existence is disrupted, enforcing a novel face-to-face encounter with nature (345), certainly a post-Romantic perspective, but possibly also a far-reaching philosophical insight taking us far beyond poetic fantasy and probably also the natural sciences as practiced today.⁵

Natural catastrophes would hence serve as epistemological instruments in shaping human notions of nature identifying it, for instance, no longer as a maid or a servant, but as a power all by itself that operates independently and could become a danger to human societies at large (345). After all, such catastrophes have happened throughout time with devastating consequences for human lives, animals, and plants, as poets, artists, chroniclers, and others have regularly reported.⁶ In this respect, nature is regarded as a dangerous force that could under specific circumstances threaten all of human existence.⁷ Before that major disrup-

phie, 550 (Würzburg: Königshausen & Neumann, 2014), 79–85. Though a bit older, see also Hubert L. Dreyfus, *Being-in-the-World: A Commentary on Heidegger's BT, Division* (Cambridge, MA: The MIT Press, 1991).

5 See now the collection of studies on the events as they occurred in our daily lives, *Trouble Every Day: Zum Schrecken des Alltäglichen*, ed. Anna Hordych und Johannes Ungelenk (Paderborn: Brill, Fink, 2024). The modern perspectives might apply to the pre-modern world as well.

6 See the contribution to this volume by Nurit Golan addressing the visual depiction of nature crushing giants in the famous frescoes by Giulio Romano in the ‘Room of the Giants’ at the Palazzo del Te, Mantua (sixteenth century). See also Kay P. Jankrift, *Brände, Stürme, Hungersnöte: Katastrophen in der mittelalterlichen Lebenswelt* (Sigmaringen: Jan Thorbecke, 2003); *Reflexe eines Umwelt- und Klimabewusstseins in fiktionalen Texten der Romania Untertitel: Eigentliches und uneigentliches Schreiben zu einem sich verdichtenden globalen Problem*, ed. Cornelia Klettke and Georg Maarg. *Romanistik*, 7 (Berlin: Frank & Timme, 2010); and Catherine E Rigby, *Dancing with Disaster: Environmental Histories, Narratives, and Ethics for Perilous Times. Under the Sign of Nature: Explorations in Ecocriticism* (Charlottesville, VA, and London: University of Virginia Press, 2015). Thomas Labbé, *Les catastrophes naturelles au Moyen âge: XIIe–XVe siècle*. *Biblis*, 231 (Paris: CNRS éditions, 2020). He focuses mostly on chronical accounts; those, of course, shed critically important light on people’s general emotional responses to catastrophes.

7 For concrete examples from late medieval Italy, see the contribution to this volume by Fabian Alfie. Cf. also the articles in *The Crisis of the 14th Century: Teleconnections between Environmental and Societal Change?*, ed. Martin Bauch and Gerrit Jasper Schenk. *Das Mittelalter: Perspektiven mediävistischer Forschung*, 13 (Berlin and Boston: Walter de Gruyter, 2020). See also Bruce M. S. Campbell, “Nature as Historical Protagonist: Environment and Society in Pre-Industrial Eng-

tion, ‘technology’ would blind the ordinary individual in viewing nature as nothing but a resource or material quarry for human beings to shape their own lives (346; see, above all, Heidegger’s *Being and Time*).⁸

If people were to understand nature only from a utilitarian perspective, they would perceive it as a blind and passive entity by itself that would be subservient to human needs and desires. Nature would, in those cases, be nothing but a slave to human society or simply a resource to be used freely, and not the other way around (345). For Heidegger, however, the true character of nature would consist of its own existence independent from humans, both in material and aesthetic terms, and this very much in terms of how the Baroque poet Angelus Silesius (Johannes Scheffler, 1624–1677) had already recognized the very nature of nature in his vast number of epigrams, defining the rose, for instance, in its effort to bloom for no other purpose but just that (and to attract insects for pollination).⁹ In an uncanny way, Heidegger seems to have predicted the current conditions of human society trying to appropriate nature in a totally technological way, which blinds the

land.” *The Economic History Review* 63.2 (2010): 281–314; Bruce M. S. Campbell, *The Great Transition: Climate, Disease and Society in the Late-Medieval World. The 2013 Ellen McArthur Lectures* (Cambridge: Cambridge University Press, 2016). Very informative prove to be the studies by Kay Peter Jankrift, *Brände, Stürme, Hungersnöte: Katastrophen in der mittelalterlichen Lebenswelt* (see note 6); Gerhard Fouquet and Gabriel Zeilinger, *Katastrophen im Spätmittelalter* (Darmstadt and Mainz: Philipp von Zabern, 2011); and to *Krisen, Kriege, Katastrophen: zum Umgang mit Angst und Bedrohung im Mittelalter*, ed. Christian Rohr, Ursula Bieber, and Katharina Zeppezauer-Wachauer. *Interdisziplinäre Beiträge zu Mittelalter und Früher Neuzeit*, 3 (Heidelberg: Universitätsverlag Winter, 2018). For a very specific case in the late Middle Ages, see Eveline Zbinden, “Das Magdalenen-Hochwasser von 1342: der ‘hydrologische Gau’ in Mitteleuropa,” *Wasser, Energie, Luft / Schweizerischer Wasserwirtschaftsverband: Schweizerische Vereinigung für Gewässerschutz und Lufthygiene* 103.3 (2011): 193–203; most seminal proved to be Jacques Berlioz, *Catastrophes naturelles et calamités au Moyen Age*. *Micrologus’ Library*, 1 (Florence: Sismel – Edizioni del Galluzzo, 1998).

8 Martin Heidegger, *Being and Time*. A Translation of *Sein und Zeit*, trans. Joan Stambaugh. SUNY Series in Contemporary Continental Philosophy. Seventh Reprint (1927/1953; Albany, NY: State University of New York Press, 1996); online at: <https://www.naturalthinker.net/trl/texts/Heidegger,Martin/Heidegger,%20Martin%20-%20Being%20and%20Time/Being%20and%20Time.pdf> (last accessed on Nov. 19, 2023). Another very important contribution to the topic of nature is Heidegger’s article, “Vom Wesen und Begriff der Φύσις. Aristoteles, Physik B, 1,” id., *Wegmarken*. *Ausgewählte Schriften*. *Klostermann Rote Reihe*, 12239–301 (2013; Frankfurt a. M.: Vittorio Klostermann, 2018), 239–301.

9 Albrecht Classen, “Johann Scheffler (Angelus Silesius): The Silesian Mystic as a Boethian Thinker. Universal Insights, Ancient Wisdom, and Baroque Perspectives,” *Humanities Open Access* 7.127 (2018): 1–12, Dec. 4, 2018; <https://doi.org/10.3390/h7040127>; id., “The Secret and Universal Relevance of Johann Scheffler’s (Angelus Silesius’s) Epigrams: Mystico-Philosophical Messages from the World of the Baroque for the Twenty-First Century,” *The Comparatist* 44 (2020): 215–34.

individual to the countless other ways of acknowledging nature as an entity on its own terms, being highly complex and independent (346), whether we approach this from the point of view of the Holocene or the Anthropocene.

We are thus strongly invited in the postmodern world to look for alternatives and innovative ways to recover the true relationship between nature and humans, and the pre-modern world might thus serve as a quite productive staging ground for this new epistemological investigation. Medieval and early modern natural scientists – perhaps a little anachronistic term here – were certainly struggling hard to understand nature in many different terms, materially, symbolically, morally, spiritually, or aesthetically.¹⁰ The more we turn to the past, the more we might be able to recognize the necessary strategies for a future relationship between both sides, nature and human society. Since people exist here on earth, they have become part of nature, and yet they are both object and subject, observer, agent, and passive individual, as the rather common experience of natural disasters indicates. To study nature in the Middle Ages and the early modern age unquestionably requires that we keep the anthropological dimension in mind because all knowledge or ideas about that world derive, at least for us, from human perceptions.¹¹ Nature itself does not seem to speak its own language, talking to itself, maybe, as far as we can tell, although there are now many indications that communication does occur within species (trees, for instance, communicate with each other via mycorrhizal

10 See the studies by Nurit Golan, “A Portal to Knowledge: Science on Public Display in the Holy Cross Parish Church at Schwäbisch Gmünd,” *Nuncius* 33 (2018): 25–55; eadem, “A Shift Toward Secularization: The Reliefs of the West Portal of Ulm Minster (1377–1420),” *Medievalistik* 34 (2021): 175–212. Cf. also Kellie Robertson, *Nature Speaks: Medieval Literature and Aristotelian Philosophy*. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2017); *The Visualization of Knowledge in Medieval and Early Modern Europe*, ed. Marcia Kupfer, Adam S. Cohen, J. H. Chajes. Studies in the Visual Cultures of the Middle Ages (SVCMA), 16 (Turnhout: Brepols, 2020). Both here and throughout, I am guilty of not paying enough attention to the history of sciences in the Arabic and Hebrew cultures. The impact of Arabic scholars and scientists on their subsequent European colleagues cannot be overestimated. But see, for instance, Labeed Ahmed Bsoul, *Medieval Islamic World: An Intellectual History of Science and Politics* (New York, Bern, et al.: Peter Lang, 2018).

11 Roberto de Amorim Almeida, *Natur und Geschichte: Zur Frage nach der Ursprünglichen Dimension abendländischen Denkens vor dem Hintergrund der Auseinandersetzung zwischen Martin Heidegger und Karl Löwith*. Monographien zur Philosophischen Forschung (Meisenheim am Glan: Hain, 1976). Cf. more globally, Georg Picht, *Der Begriff der Natur und seine Geschichte*. Picht, Georg: Vorlesungen und Schriften, beg (Stuttgart: Klett-Cotta, 1989); Hans-Peter Hempel, *Natur und Geschichte: der Jahrhundertdialog zwischen Heidegger und Heisenberg*. Athenäums Monographien / Philosophie, 261 (Frankfurt a. M.: Hain, 1990). See also Martin Heidegger, *Naturaleza, historia, estado*; edición, traducción y prólogo de Jesús Adrián Escudero. Colección Estructuras y procesos. Serie Filosofía (Madrid: Editorial Trotta, 2018).

networks to protect themselves against a toxic invader or an imminent drought.¹² Many other plants and animals speak to each other, in ways we have mostly not yet figured out.

Nevertheless, the present volume focuses on human perspectives on nature. The natural sciences, as important as they prove to be in countless ways, thus also emerge as a dangerous avenue for all intellectual endeavors to come to terms with the natural environment because they tend to consider the material dimension as a tool or instrument only, and not as an individual with its own agency. Nature must yield its properties to the scientist, who thus tends to be a manipulator, fabricator, instrumentalizer, and ultimately as an abuser who treats nature as an object of scientific investigation, and not as a world with its own qualities and properties (347). Nature would deserve a respectful treatment as an independent, powerful, intriguing, and valuable entity of this world which most scientists could not even appreciate since they operate only as utilitarians (349).¹³

We are, as humans, simply part of nature and yet we also engage with it critically by way of distancing ourselves and returning to it depending on our self-awareness and physical framework, our needs and interests, our social and intellectual conditions. We could probably not find any literary, historical, philosophical, or religious work that would not have engaged in one way or the other with nature since all life is embedded in it, derives from it, and returns to it.¹⁴ In epistemological

¹² See, for instance, though more literary or popular in nature, Michael Pollan, *The Botany of Desire: A Plant's-Eye View of the World* (New York: Random House Publishing Group, 2001); John Cianchi, *Radical Environmentalism: Nature, Identity and More-Than-Human Agency* (Basingstoke, Hampshire: Palgrave Macmillan, 2015). See also Peter Wohlleben, *The Hidden Life of Trees: What They Feel, How They Communicate – Discoveries from A Secret World*, trans. from the German by Jane Billinghurst. *The Mysteries of Nature*, 1 (Vancouver, BC, and Berkeley, CA: Greystone Books, 2016); id., *Waldwissen: vom Wald her die Welt verstehen: erstaunliche Erkenntnisse über den Wald, den Menschen und unsere Zukunft* (Munich: Ludwig Verlag, 2023).

¹³ See also François Guery, *Heidegger rediscuté: nature, technique et philosophie* (Paris: Descartes, 1995); Bruce V. Foltz, *Inhabiting the Earth: Heidegger, Environmental Ethics, and the Metaphysics of Nature* (Atlantic Highlands, NJ: Humanities Press, 1995); David E. Cooper, *Heidegger. Thinkers of Our Time* (London: Claridge Press, 1996); see also the contributions to *Phänomenologie der Natur*, ed. Kah Kyung Cho and Young-Ho Lee. *Phänomenologische Forschungen* (Freiburg i. Br.: Alber, 1999); Michael Lewis, *Heidegger Beyond Deconstruction: On Nature* (London and New York: Continuum, 2007); Brett Buchanan, *Onto-Ethologies: The Animal Environments of Uexküll, Heidegger, Merleau-Ponty, and Deleuze*. SUNY Series in Environmental Philosophy and Ethics (Albany, NY: SUNY Press, 2008); Raoni Padui, *Hegel and Heidegger on Nature and World. Continental Philosophy and the History of Thought* (Lanham, Boulder, New York, and London: Lexington Books, 2023).

¹⁴ See the contributions to *Reading the Natural World in the Middle Ages and the Renaissance: Perceptions of the Environment and Ecology*, ed. Thomas Willard. Arizona Studies in the Middle

terms, all our concepts, ideas, and references are more or less based on nature, that is, the physical environment, whether in direct terms or allegorically.

In fact, everything about us as living creatures constitutes or derives from nature, whether we are aware of it or not. We evolve from nature and are integral parts of it, that is, we are born as natural beings, and we return to nature when we die. Often, human arrogance tends to erect artificial barriers between, on the one hand, the self, society, culture, technology, government, or the Church, and, on the other, the environment, that is, the physical or biological world surrounding us. In essence, however, everything is nature, even including built-up spaces, as alienating or artificial those might be. The physical dimension often appears as constructed and fake, but even then, we cannot deny that it consists of natural conditions. Only pure philosophy, literary imagination, or artistic projections are fairly divorced from that reality, although the ideas behind them still continue to be predicated on the real world, derive from it, impact it, and might also be opposed to it. The human mind can invent many other worlds, but even those are natural in one way or the other since they would otherwise incomprehensible and remain undetectable.¹⁵ Throughout the history of literature, poets (like artists) have drawn from nature as a resource for symbols, metaphors, illustrations, analogies, and realistic comparisons. This was already very much the case in pre-modern didactic literature, especially in the genre of fables.¹⁶

Ages and the Renaissance, 46 (Turnhout: Brepols, 2020); and to *The Book of Nature in the Middle Ages and Renaissance*, ed. David Hawkes and Richard Newhauser. Arizona Studies in the Middle Ages and the Renaissance, 46 (Turnhout: Brepols, 2019). Both volumes reveal the deep challenges any approach to this topic entails because the variety of studies addressing nature is overwhelming, which makes it rather difficult to determine a common denominator. Moreover, the editors of each volume have opened the historical perspective widely, allowing contributors to address nature also far into the seventeenth and eighteenth centuries. The present volume will be also highly interdisciplinary and cross-chronological, simply by default so as to address the myriad of concepts of nature throughout the centuries and across society.

¹⁵ See the contributions to *Imagination and Fantasy in the Middle Ages and Early Modern Times: Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 24 (Berlin and Boston: Walter de Gruyter, 2020).

¹⁶ See the contributions to *Von der Allegorie zur Empirie: Natur im Rechtsdenken des Spätmittelalters und der Frühen Neuzeit*, ed. Susanne Lepsius, Friedrich Vollhardt, and Oliver Bach. Abhandlungen zur rechtswissenschaftlichen Grundlagenforschung, 100 (Berlin: Erich Schmidt Verlag, 2018); cf. also Sandra Hofert, *Didaxe und Natur: Darstellung und Funktionalisierung der Natur in Thomasins von Zerklare "Welschem Gast", in Freidanks "Bescheidenheit" und in Hugos von Trimberg "Renner"*. Wissensliteratur im Mittelalter, 56 (Wiesbaden: Dr. Ludwig Reichert Verlag, 2021). Fable literature, of course, has already been discussed at length; see, for instance, the contributions to *Tiere und Fabelwesen im Mittelalter: Zu ihrer Bedeutung in Wissenschaft, Reli-*

Whether thinkers or writers throughout time thought of Paradise, utopian spaces, cosmic entities, or dream worlds, the natural framework has always been fundamental in that context being the critical benchmark to reflect upon everything in our existence, even when the goal was to project an alternative world.¹⁷ Of course, most people have always had much fantasy and imagination, as the world of artworks, literature, music, or philosophy indicates. But even the most unrealistic concepts of alternative dimensions – monsters, dwarfs, giants, dragons, fairies, sorceresses, angels, devils, gods, or spirits – have always been predicated on nature as it surrounds us, either by way of contrast or challenge, as the Middle High German poet Der Stricker demonstrated in a rather unique way with his romance *Daniel von dem Blühenden Tal* (ca. 1220). Often, there tends to be an element of similarity or resemblance; otherwise, there would not be an easily comprehensible language to talk about the other creatures or visuals to represent them in a somewhat recognizable way.¹⁸

Neither the biblical Paradise, as outlined in Genesis, nor Dante's *Inferno* and the other parts of his *Divina Commedia* (ca. 1320), for instance, neither the underworld as projected by Virgil (70–19 B.C.E.) in his *Aeneid* (ca. 29–19 B.C.E.) nor the dragon's lair in the Old English *Beowulf* (ca. 750 C.E.) were completely out of this world and reflected on human concepts of extraordinary spaces, determined by

gion, Geschichte, Bildender Kunst und Literatur, ed. Sabine Obermaier (Berlin and New York: Walter de Gruyter, 2009).

17 See the contributions to *Utopie im Mittelalter: Begriff – Formen – Funktionen*, ed. Heiko Hartmann and Werner Röcke. Das Mittelalter, 18.2 (Berlin: Akademie Verlag, 2013); and to *'Landschaft' im Mittelalter? – Augenschein und Literatur*, ed. Jens Pfeiffer. Das Mittelalter, 16.1 (Berlin: Akademie Verlag, 2011).

18 Jeffrey Jerome Cohen, *Of Giants: Sex, Monsters and the Middle Ages*. Medieval Culture, 17 (Minneapolis, MN: University of Minnesota Press, 1999); id., "Monster Culture (Seven Theses)," *Monster Theory: Reading Culture*, ed. Jeffrey Jerome Cohen (Minneapolis, MN: University of Minnesota Press, 1996), 3–25; Walter Stephen, *Giants in Those Days: Folklore, Ancient History and Nationalism* (Lincoln, NE: University of Nebraska Press, 1989); see also the contributions to *Marvels, Monsters, and Miracles: Studies in the Medieval and Early Modern Imaginations*, ed. Timothy S. Jones and David A. Sprunger. Studies in Medieval Culture, 42 (Kalamazoo, MI: Medieval Institute Publications, 2002); Tina Marie Boyer, *The Giant Hero in Medieval Literature*. Explorations in Medieval Culture, 2 (Leiden and Boston: Brill, 2016); Alan Lena van Beek, *Riesen in der Literatur des Mittelalters: Diskursive Formationen im deutschen Sprachraum*. Archivum Medii Aevi Digitale – Studies: Theses (Frankfurt a. M.: Archivum Medii Aevi Digitale, 2021); see also the contributions to *Monster, Chimären und andre Mischwesen in den Text- und Bildwelten der Vormoderne*, ed. Brigitte Burrichter and Dorothea Klein. Würzburger Ringvorlesungen, 20 (Würzburg: Königshausen & Neumann, 2022); cf. now also Albrecht Classen, "Bestiality in the West: Geraldus of Wales's Sexual Fantasies about the Irish Borderlands: A Medieval Colonialist's Worldview," *Global Journal of Cultural Studies* 3 (2024): 42–52; online at: <https://lifescienceglobal.com/pms/index.php/GJCS/article/view/9493> (last accessed on Feb. 9, 2024).

their natural conditions, maybe as literary mirrors of the human unconsciousness.¹⁹ Mystical visions, apocalyptic scenarios, dreams, fantastic travelogues, and other media invested in utilizing alternative perceptions of a curious ‘reality’ hardly ever move away from the realistic model provided by nature. As grotesque and ferocious as the many devilish or monstrous creatures often may be in depictions of Purgatory and Hell – see, for instance, the cathedrals of Albi, or the Scrovegni Chapel in Padua (painted by famous Giotto) – they are so terrifying not because of their complete otherness, but, quite on the contrary, because of their familiarity and grotesque similarity with natural objects or beings.²⁰

Nature all by itself has no particular hermeneutic function or character, as far as people are concerned; it has always been viewed through an anthropological lens, an insight which deeply informs the contributions to the present volume, which allows us to advance in the current research on nature in the pre-modern

19 Bernard F. Huppé, “Nature in Beowulf and Roland,” *Approaches to Nature in the Middle Ages: Papers of the 10th Annual Conference of the Center for Medieval & Early Renaissance Studies*, ed. Lawrence D. Roberts. Medieval & Renaissance Texts & Studies, 10 (Binghamton: Center for Medieval and Renaissance Studies, 1982), 4–41; see, most recently, Christopher Abram, “At Home in the Fens with the Grendelkin,” *Dating Beowulf: Studies in Intimacy*, ed. Daniel C. Remein and Erica Weaver. Manchester Medieval Literature and Culture, 30 (Manchester: Manchester University Press, 2020), 120–44, who argues that the unknown poet drew inspiration for his depiction in very concrete terms from the fenland environments in Norfolk. It seems absurd, however, to claim that Beowulf pursued colonialist or imperialist goals. Cf. also Justin T. Noetzel, “Monster, Demon, Warrior: St. Guthlac and the Cultural Landscape of the Anglo-Saxon Fens,” *Comitatus: A Journal of Medieval and Renaissance Studies* 45 (2014): 105–31. It makes sense to explore also what pre-modern authors had to say about the world of the outer space because their notions about extraterrestrial beings/peoples mirrored of course their concept of human existence at large. See the contribution to this volume by Reinhold Münster.

20 Peter Dinzelsbacher, *Himmel, Hölle, Heilige: Visionen und Kunst im Mittelalter* (Darmstadt: Primus Verlag, 2002), 11–12. I would suggest that his argument that many of these grotesque, monstrous figures served as inspiration for much of medieval visionary literature could also be turned around, if we focus on the people behind those artworks. The horror that those objects intended to evoke was only possible because the images were, in many ways, somehow recognizable, and yet not quite the same as ordinary people or animals. Completely alien creatures are either not perceptible or not understandable at all. See also the catalogue accompanying an exhibition in Cologne, *Himmel, Hölle, Fegefeuer: Das Jenseits im Mittelalter*, ed. Peter Jezler (Munich: Wilhelm Fink, 1994); Eileen Gardiner, “Hell, Purgatory, and Heaven,” *Handbook of Medieval Culture: Fundamental Aspects and Conditions of the European Middle Ages*, ed. Albrecht Classen. Vol. 1 (Berlin and Boston: Walter de Gruyter, 2015), 653–73; *Imagining the Medieval Afterlife*, ed. Richard Matthew Pollard (Cambridge: Cambridge University Press, 2020); Dorothe Sattler, *Hölle* (Göttingen: Vandenhoeck & Ruprecht, 2023). For a valuable discussion of giants and their collapse due to natural forces in Renaissance art, see Nurit Golan’s contribution to this volume.

world.²¹ Yet, we need to keep in mind the multiplicity of perceptions concerning nature, which highly complicates the examination of our topic, whether we approach it as medievalists or modernists.²² Of course, as Heidegger would then counter, this also implies that we are blind to the very properties and character of nature and recognize it only insofar as we can perceive it. Hence, studying medieval and early modern human society offers many new insights by focusing on the way that nature was recognized and treated by people, and also how nature impacted human society and vice versa.²³

According to Heidegger, as Michael Wheeler formulates it, “[the] fact that Reality [intelligibility] is ontologically grounded in the Being of Dasein does not signify that only when Dasein exists and as long as Dasein exists can the Real [e.g., nature as revealed by science] be as that which in itself it is” (*Being and Time*, 43: 255).²⁴ Further, nature constitutes a deep challenge to human epistemology because the question immediately arises what this physical dimension might actually be if there would be no one to recognize it as such. Hence, to study nature also requires a heavy dose of anthropological concepts, that is, a foundation of all perceptions within the human mind. We have no idea whether nature talks to itself or about itself, but we can be certain that from the earliest times of human existence, people have actively engaged with nature and have tried to come to terms with it.

21 *The Book of Nature and Humanity*, ed. Hawkes and Newhauser (see note 14); *Reading the Natural World*, ed. Willard (see note 14). Cf. also the contributions to *Man and Nature in the Middle Ages*, ed. Susan J. Ridyard. Sewanee Mediaeval Studies, 6 (Sewanee, TN: University of the South Press, 1995).

22 Søren Overgaard, *Husserl and Heidegger on Being in the World*. *Phaenomenologica*, 173 (Dordrecht, Boston, and London: Kluwer Academic Publishers, 2004), 123–25.

23 See, for instance, the contributions to *Nature and Society: Anthropological Perspectives*, ed. Philippe Descola and Gísli Pálsson (London and New York: Routledge, 1996); *Natur – Kultur: Zur Anthropologie von Sprache und Literatur*, ed. Thomas Anz (Paderborn: mentis, 2009); *Anthropology and Nature*, ed. Kirsten Hastrup. Routledge Studies in Anthropology (London and New York: Routledge, 2015); Gísli Pálsson, *Nature, Culture and Society: Anthropological Perspectives on Life* (Cambridge: Cambridge University Press, 2016); Markus Gabriel, *Der Mensch als Tier: warum wir trotzdem nicht in die Natur passen* (Berlin: Ullstein, 2022). Undoubtedly, contemporary anthropology has grasped deeply that human existence must be viewed through a natural lens and that people's lives have always been determined by their engagement with the natural environment. The current literature on this topic is legion.

24 Michael Wheeler, “Martin Heidegger,” *Stanford Encyclopedia of Philosophy* (2011), online at <https://plato.stanford.edu/entries/heidegger/#BeiTim> (last accessed on Nov. 18, 2023).

As Wheeler confirms in light of Heidegger's philosophical concepts,

Indeed, Being concerns sense-making (intelligibility), and the different ways in which entities make sense to us, including as present-at-hand, are dependent on the fact that we are Dasein, creatures with a particular mode of Being. So while natural entities do not require the existence of Dasein in order just to occur (in an ordinary, straightforward sense of 'occur'), they do require Dasein in order to be intelligible at all, including as entities that just occur. Understood properly, then, the following two claims that Heidegger makes are entirely consistent with each other. First: "Being (not entities) is dependent upon the understanding of Being; that is to say, Reality (not the Real) is dependent upon care". Secondly: "[O]nly as long as Dasein is (that is, only as long as an understanding of Being is ontically possible), 'is there' Being. When Dasein does not exist, 'independence' 'is' not either, nor 'is' the 'in-itself'" (Both quotations from *Being and Time*, 43: 255).²⁵

However, the critical approach to our topic should not be limited to a superficial or presumed tension or conflict between nature or non-nature, whatever that might entail (such as mysticism); instead, it ought to address the question of how we as individuals with a sensory awareness of ourselves and the natural environment interact with all that and how we come to terms with the material existence within ourselves and outside. The spiritual dimension cannot be denied, though many people throughout time have tried to ignore it to avoid handling the really difficult questions in our lives. Ironically, our own bodies constantly remind us that we operate as material beings, ingesting and digesting food, eliminating toxic waste elements. We breathe in and out, we consume energy and create new energy, and thus we are an intimate part of nature in its infinite cycles of the transformation of materials and energies.

Moreover, all our ideas, creative concepts, or thought processes operate the same way, since there is input, process, and output. That means that the physical condition itself is absolutely critical in our understanding of reality, so the fact of nature being the ever-present existence assumes central importance. This has the stupendous consequence, if we take those concepts seriously, that the traditional divide between STEM and the Humanities really would have to be overcome since the natural sciences simply study the other side of the same coin, the human being within the natural context, and nature in its own dimension and also engagement with people.²⁶ Of course, STEM focuses primarily on the physical

²⁵ Wheeler, "Martin Heidegger" (see note 24).

²⁶ James Hankins, "How to Build Your Own Renaissance," *Public Discourse: The Journal of the Witherspoon Institute* (July 28, 2021); online at: <https://www.thepublicdiscourse.com/2021/07/76951/> (last accessed on Sept. 16, 2023), argues that the Humanities in their traditional context should be brought back to life in order to revive our moral and ethical value system that has never been superseded and still operates as in the pre-modern world. Both the ancient classics

dimensions, and the Humanities cover the spiritual and aesthetic aspects, among many other topics, but it remains, after all, the human body and mind that interact with and are determined by nature. This was, of course, throughout the high and late Middle Ages a profound puzzle and occupied such great minds as Hugh of St. Victor (ca. 1096–1141) and Dominicus Gundissalinus (ca. 1115–after 1190) who both, each in his own way, set up new concepts of the Quadrivium, hence the mechanical arts, and sciences. The former drew more from the Augustinian-Christian tradition, the latter more from the Arabic-Judaic one.²⁷

The quest for human identity, however, has always implied that we attempt to distinguish ourselves from what we perceive as nature, such as plants and animals, rocks and water, soil, fire and air (the four elements), etc. This struggle can also be equated with the struggle against death because human life is simply limited, like that of all living creatures. Everything living fights with all its might against death, consciously or not, and yet must bend under its authority.²⁸ All we

and medieval voices hence carry great weight for us today. See also Laurie Grobman and E. Michele Ramsey, *Major Decisions: College, Career, and the Case for the Humanities* (Philadelphia, PA: University of Pennsylvania Press, 2020); cf. also the contributions to *Higher Education in the Era of the Fourth Industrial Revolution*, ed. Nancy W. Gleason (Singapore: Palgrave Macmillan, 2018); Writing STEAM: Composition, STEM, and a New Humanities, ed. Vivian Kao and Julia Kiernan (New York: Routledge, 2022). The discussion on this huge question is ongoing, but there are also good pragmatic approaches, as I believe to have developed successfully, e.g., Albrecht Classen, “STEM and Teaching German Language and Literature with an Interdisciplinary Approach: Eighteenth-Century Reports by German Jesuit Missionaries in the German Classroom,” *Die Unterrichtspraxis* 51.1 (2018): 53–62; id., “Medieval Literature as an Archive of Human Experiences: The Middle Ages as a Depository of Human Knowledge, Wisdom, Happiness, and Suffering,” *Current Research Journal of Social Sciences and Humanities* 6.2 (2023), online at: <https://bit.ly/44SUlee>; id., “The Relevance of the Middle Ages – Revisiting an Old Problem in Light of New Approaches and Teaching Experiences in a Non-Western Context,” *New Chaucer Studies* 4.2 (2023): 128–37. *Pedagogy and Profession*, ed. Gregory M. Sadlek, online at: <https://doi.org/10.5070/NC34262332>. See now also the latest reflections on this subject matter, Chris Haufe, *Do the Humanities Create Knowledge?* (Cambridge: Cambridge University Press, 2023), who questions the notion that scientific knowledge is the only epistemological domain worth considering. Behind much of our understanding of nature, for instance, rests a creative, spiritual notion that ultimately ended up in barebone ‘facts’ and details, ignoring the much larger picture of nature. As he notes, “we forget how much of scientific expertise comes from reading and writing, looking, and listening” (15).

27 Kevin Renner, *Konzeptionen von Philosophie im 12. Jahrhundert: Zum Begriff der Philosophie bei Hugo von St. Viktor und Dominicus Gundissalinus in ihren Werken* Didascalicon und De Divisione Philosophiae. Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters, Neue Folge, 9 (Münster: Aschendorff Verlag, 2023); see my very positive review in *Mediaevistik* 36 (forthcoming).

28 This has been beautifully expressed in the dialogue poem by the Bohemian-German Johann von Tepl, *The Plowman* (ca. 1400), in which the plowman argues against and with death about the meaning of life and death. While the plowman eventually accepts, although only grudgingly,

can do is to live honorably and happily and thus to create a good memory, to sustain and endure our suffering and to reach out to our fellow citizens in a peaceful and constructive manner.²⁹ To this end, it has always been essential for the individual to exist in harmony with nature, that is, to understand and embrace the fact that we are, under whatever conditions, part of nature and can only endeavor to work toward that goal of living up to the best our potentials might entail.

Anthropocene

However, as we are currently becoming more and more aware, that harmony is completely out of sync (2024), and we might even face catastrophic changes in climate and hence in nature in the near future. Global warming has arrived and is going to get only worse in the near future, and some of the horrific consequences have been scorching heat, massive flooding, enormous wildfires, drought, and hence famine. The Anthropocene has been brought about by human actions, and it is no longer ‘Mother Nature’ and us in harmony or conversation with each other, certainly an infantile dream that probably has never been a fact, in reality.

Currently (2024), the human race is growing at an alarming rate, it consumes more resources than can be replenished, it destroys the natural environment in a catastrophic manner, and it has thus gained a power position that negatively im-

that death is unavoidable, which is the conclusion of God's judgment, he is pleased, and so are we, that the human strife for his/her own self in a dignified manner earns him/her God's honor. For the most comprehensive study on this text, see Christian Kiening, *Schwierige Modernität: Der 'Ackermann' des Johannes von Tepl und die Ambiguität historischen Wandels*. Münchener Texte und Untersuchungen zur deutschen Literatur des Mittelalters, 113 (Tübingen: Max Niemeyer, 1998); Albrecht Classen, “Irony in Medieval and Early Modern German Literature (Nibelungenlied, Mauritius von Craün, Johannes von Tepl's Ackermann): The Encounter of the Menschlich-Allzumenschlich in a Medieval Context,” *Journal of English and Germanic Philology* 113.2 (2014): 184–205; id., “Mental and Physical Health, Spirituality and Religion in the Middle Ages and Early Modern Age: Medieval Answers for Our Future? With Special Emphasis on Spiritual Healing Through Narratives of Mourning: Johannes of Tepl and Christine de Pizan,” *Mental Health, Spirituality, and Religion in the Middle Ages and Early Modern Age*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 15 (Berlin and Boston: Walter de Gruyter, 2014), 1–154. For a solid text edition, see Johann von Tepl, *Der ackerman*, ed. Willy Krugmann. Deutsche Klassiker des Mittelalters. Neue Folge, 1. 2nd ed. (1953; Wiesbaden: F. A. Brockhaus, 1964); for an English translation, see Michael Haldane, online at: <https://www.michaelhaldane.com/Husbandman%20and%20Death.pdf> (last accessed on June 24, 2023).

²⁹ See the contributions to *Death in the Middle Ages and Early Modern Times: The Material and Spiritual Conditions of the Culture of Death*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 16 (Berlin and Boston: Walter de Gruyter, 2016).

pacts nature and hence also humanity and all living creatures.³⁰ Of course, natural disasters have always and regularly occurred, whether flooding, earthquakes, volcanic eruptions, or wildfires.³¹ As urgent as it would be from a contemporary perspective, the present book is not going to be about climate change or the danger to our planet brought about by human actions. Instead, the focus rests on the ever-changing relationship between nature and culture, humans and the physical world, so it takes into consideration the epistemological function of nature within the

30 *Rethinking the Environment for the Anthropocene: Political Theory and Socionatural Relations in the New Geological Epoch*, ed. Manuel Arias-Maldonado and Zev Trachtenberg (London and New York: Routledge, 2019); John Carrell, Hannah Keaty, and Aliza Wong, "Humanities-Driven STEM – Using History as a Foundation for STEM Education in Honors." *Honors in Practice – Online Archive. DigitalCommons@University of Nebraska – Lincoln*, online at: <https://files.eric.ed.gov/fulltext/EJ1256520.pdf> (2020); Michael J. Gormley, *The End of the Anthropocene: Ecocriticism, the Universal Ecosystem, and the Astropocene* (Lanham, Boulder, New York, and London: Lexington Books, 2021); Serpil Oppermann, *Ecologies of a Storied Planet in the Anthropocene* (Morgantown, WV: West Virginia University Press, 2023); Jonathan Pugh and David Chandler, *The World as Abyss: The Caribbean and Critical Thought in the Anthropocene* (London: University of Westminster Press, 2023); Michael Holm and R. S. Deese, *How Democracy Survives: Global Challenges in the Anthropocene*. Democratization and Autocratization Studies (Abingdon, Oxon, and New York: Routledge, 2023); Mustafa Suleyman and Michael Bhaskar, *The Coming Wave: Technology, Power, and the Twenty-First Century's Greatest Dilemma* (New York: Crown, 2023). See also A. Ertas, "Transdisciplinarity: Bridging Natural Science, Social Science, Humanities, & Engineering," online at: <https://www.scribd.com/document/118> (2011) (last access on Feb. 23, 2024; download required). The number of relevant studies is legion, and they address increasingly social, political, ethical, cultural and religious concerns involved in the dramatic changes of our world. That means, changes in nature have, of course, a profound impact on human society. See also Colin N. Waters et al., "The Anthropocene Is Functionally and Strategically Distinct from the Holocene," *Science* 35.3269 (Jan. 2019): 1–26; online at: https://nora.nerc.ac.uk/id/eprint/512756/1/Waters%20et%20al_Science_v2.pdf (last accessed on Nov. 1, 2023).

31 See the contributions to *Natural Disasters, Cultural Responses: Case Studies Toward a Global Environmental History*, ed. Christof Mauch and Christian Pfister (Lanham, Boulder, New York, and London: Lexington Books, 2009); *Naturkatastrophen: Deutungsmuster vom Altertum bis in die Neuzeit*, ed. Andreas Höfele and Beate Kellner (Paderborn: Brill Fink, 2023); and to *Making the Medieval Relevant: How Medieval Studies Contribute to Improving Our Understanding of the Present*, ed. Chris Jones, Conor Kostick, and Klaus Oschema. *Das Mittelalter: Perspektiven mediävistischer Forschung*, Beihefte 6 (Berlin and Boston: Walter de Gruyter, 2020). Some of the contributors address medicine, genetics, flooding events, and geoengineering. See also Jacques Berlioz, *Catastrophes naturelles et calamités au Moyen Age*. *Micrologus' Library*, 1 (Turnhout: Brepols, 1998); *Disaster, Death and the Emotions in the Shadow of the Apocalypse, 1400–1700*, ed. Jennifer Spinks and Charles Zika. *Palgrave Studies in the History of Emotions* (Basingstoke: Palgrave Macmillan, 2016). Cf. also François Walter *Katastrophen: Eine Kulturgeschichte vom 16. bis ins 21. Jahrhundert* (Stuttgart: Philipp Reclam jun., 2010); Kate Rigby, *Dancing with Disaster: Environmental Histories, Narratives, and Ethics for Perilous Times*. *Under the Sign of Nature: Explorations in Ecocriticism* (Charlottesville, VA, and London: University of Virginia Press, 2015).

human context. Every historical or literary phenomenon can be defined through the analysis of this relationship. Future generations, for instance, will judge us in terms of our interaction with our natural environment; whether we have been good stewards or not.³²

As relevant as nature has always been for humans, however, surprisingly there has hardly ever been a proper approach to this relationship, as the current world has to realize more than ever before. Human society has always tended to use nature to the fullest possible extent, or to ignore its presence to the detriment of our own lives. A ‘peaceful’ interaction with nature seems to be most difficult because people have always appropriated nature to an extreme for selfish reasons, and largely they have not demonstrated any (or at least not enough) interest in being good stewards of their environment. But maybe the term ‘peace’ would be completely irrelevant with regard to our interaction with nature because we as living creatures rely on the resources provided by nature and thus we can be part of nature. There is, ultimately, no difference between people and nature, although we also observe a pervasive, perhaps even perverse utilization of nature for people’s own needs. The critical question would hence rather be whether we understand nature as a gift given to humanity (by God, however defined, or any other superior power) and acknowledge the great need to treat it respectfully as our own cradle, living space, and deathbed.

Both in antiquity and in the Middle Ages, both in the early modern age and today, the earth has regularly been exploited for human profit, and nature has sustained those frontal attacks by being highly resilient and potent enough to recover even some of the worst wounds and scars, such as mining, wars, catastrophic breakdowns of nuclear power stations (Three Mile Island, Chernobyl, Fukushima Daiichi, and others). We have enough nuclear bombs today to destroy the entire world, but fortunately, those have not yet been used on any battlefield. Military aggression, however, might overcome all thresholds set up so far to prevent that catastrophe to happen under certain circumstances.

Utilizing forests for shipbuilding, making of charcoal, and agriculture has always had a huge impact on the natural environment; forests have often not recovered because of the loss of the basic soil, as is dramatically illustrated in the entire region of the Mediterranean and elsewhere, such as on the Easter Island (Rapa Nui) far west of Chile. The question has thus always been, though hardly

32 See now the insightful ideas recently developed by the contributors to *Posthuman? Neue Perspektiven auf Natur/Kultur*, ed. Torsten Cress, Oliwia Murawska, and Annika Schlitte (Leiden and Boston: Brill, 2023). They pursue a post-humanistic perspective and argue for a decoupling of the binary opposition of nature and culture. The contribution to our volume by Reinhold Münster pursues fairly similar strategies but is predicated on early modern texts.

ever properly addressed, how much human actions affect the physical world outside of society and what we can or should do about it.³³

Since we live in the Anthropocene today, whether we like it or not, little wonder that both scholars and authors, artists and philosophers have become much more sensitive to the critical issues at stake and hence also search for pre-modern responses by people to the challenges posed by nature.³⁴ The present volume cannot address these highly concerning topics either, but it is our responsibility to reflect upon that relationship and its long-term impact on both sides as much as possible. Moreover, we cannot be content with learning and researching about the huge and global climate change affecting us so deeply today; we also have to teach the new generation or engage in critical discussions with them about the human impact on nature throughout time (sustainability). That also means that we look at some of the older texts or images once again through an ecopoetic or ecocritical perspective and attempt to build relevant epistemological bridges between society and nature, between the Humanities and Medieval Studies/Early Modern Studies, so that all sides can profit from these new or rather old insights and theoretical models.³⁵ Of course, natural catastrophes have struck

33 For medieval and early modern case studies, see the contributions to *Natur als Grenzerfahrung: Europäische Perspektiven der Mensch-Natur-Beziehung in Mittelalter und Neuzeit: Ressourcennutzung, Entdeckungen, Naturkatastrophen*, ed. Lars Kreye, Carsten Stühling, and Tanja Zwingelberg ([Göttingen]: Universitätsverlag Göttingen, 2009). Already in the pre-modern world, there was a clear awareness of the limitations of the natural resources. After all, many times, famines, floodings, wildfires, deep freezes, heat waves, etc., hit various parts of Europe. I am, however, not addressing the global climate crisis as it affects us today.

34 Roland Bechmann, *Trees and Man: The Forest in the Middle Ages* (New York: Paragon House, 1990); *Les forêts d'Occident: Du Moyen Âge à nos jours*, ed. André Corvol-Dessert. Flarant, 24 (Toulouse: Presses universitaires du Midi, 2004); Heidi Pantermehl, "Aus dem Wald nichts Neues? Aspekte zur Siedlungs- und Wirtschaftsgeschichte des Pfälzerwaldes im Früh- und Hochmittelalter," *Berichte zur Archäologie in Rheinhessen und Umgebung* 5 (2012): 103–13; Albrecht Classen, *The Forest in Medieval German Literature: Ecocritical Readings from a Historical Perspective*. Ecocritical Theory and Practice (Lanham, Boulder, et al.: Lexington Books, 2015); id., *Water in Medieval Literature: An Ecocritical Reading*. Ecocritical Theory and Practice (Lanham, MD, Boulder, CO, et al.: Lexington Books, 2018). For a pleasant and informative introduction to many of the aspects addressed here, at least for the general reader, see Karl-Heinz Göttert, *Als die Natur noch sprach: Mensch, Tier und Pflanze vor der Moderne* (Stuttgart: Philipp Reclam jun., 2019).

35 *Teaching the Literature of Climate Change*, ed. Debra J. Rosenthal (New York: The Modern Language of America Association, forthcoming in 2024). The publisher's online presentation summarizes the intent of this book as follows: "Over the past several decades, writers such as Paolo Bacigalupi, Octavia E. Butler, Kathy Jetñil-Kijiner, and Margaret Atwood have explored climate change through literature, reflecting current anxieties about humans' impact on the planet. Emphasizing the importance of interdisciplinarity, this volume embraces literature as a means to cultivate students' understanding of the ongoing climate crisis, ethics in times of disaster, and

throughout time, and human society has regularly deeply suffered from the consequences, whether we think of heat waves, freezing temperatures, wildfires, flooding, thunderstorms, or earthquakes.³⁶ We know about those catastrophes not only from archeology or meteorology, but also from many narratives, literary, religious, or chronicle, all of which confirms that our study of nature depends critically on the human perceptions, whether we consider Gregory of Tours's testimony from the late sixth-century or comments by Johann Peter Hebel in his early nineteenth-century *Schatzkästlein des rheinischen Hausfreundes* (1811, describing a catastrophic snow avalanche in Switzerland).³⁷ The horrifying earth-

the intrinsic intersectionality of environmental issues. The contributors discuss speculative climate futures, the Anthropocene, postcolonialism, climate anxiety, and the usefulness of storytelling in engaging with catastrophe. The essays offer approaches to teaching interdisciplinary and cross-listed courses, including strategies for team-teaching across disciplines and for building connections between humanities majors and STEM majors. The volume concludes with essays that explore ways to address grief and to contemplate a hopeful future in the face of apocalyptic predictions." <https://www.mla.org/Publications/Bookstore/Options-for-Teaching/Teaching-the-Literature-of-Climate-Change> (last accessed on Sept. 25, 2023). Tragically, this topic all by itself has become politicized, with conservative governing boards increasingly banning textbooks like this one from school libraries and class reading lists, at least in the United States, reflecting a tendency to bury our heads in the sand and to pretend that all is well with nature. See, for instance, <https://www.motherjones.com/politics/2023/11/texas-board-education-climate-change-school-textbooks-vote/> (Nov. 14, 2023); <https://www.scientificamerican.com/article/texas-weakens-climate-science-education-guidelines/> (March 16, 2023), or <https://www.sierraclub.org/sierra/dont-say-gay-or-climate-change> (Sept. 20, 2022). For a good introduction, see Timothy Clark, *The Value of Ecocriticism* (Cambridge: Cambridge University Press, 2019); cf. also Vin Nardizzi, "Medieval Ecocriticism," *postmedieval: A Journal of Medieval Cultural Studies* 4 (2013): 112–23; online at: DOI: 10.1057/pmed.2012.48 (last accessed on Feb. 2, 2024; see also the list of errata).

36 See the valuable contributions to *Going Forward by Looking Back: Archaeological Perspectives on Socio-Ecological Crisis, Response, and Collapse*, ed. Felix Riede, Payson Sheets (New York and Oxford: Berghahn Books, 2020); *Historians and Nature: Comparative Approaches to Environmental History*, ed. Ursula Lehmkuhl and Hermann Wellenreuther. Krefeld Historical Symposia, 3 (Oxford: Berg, 2007); *Naturkatastrophen: Deutungsmuster vom Altertum bis in die Neuzeit*, ed. Andreas Höfele and Beate Kellner (Paderborn: Brill Fink, 2023); *Pre-Modern Towns at the Times of Catastrophes: East Central Europe in a Comparative Perspective*, ed. Michaela Antonín Malániková, Beata Mozejko, and Martin Nodl (Abingdon, Oxon, and New York: Routledge, 2024).

37 Johann Peter Hebel, *Die Kalendergeschichten: Sämtliche Erzählungen aus dem Rheinländischen Hausfreund*, ed. Hannelore Schlaffer and Harld Zils (Munich: Carl Hanser, 1999). See globally for the medieval context, Carmelina Urso, "Catastrofi naturali, carestie ed epidemie nella quotidianità e nella mentalità dell'uomo medievale. La testimonianza di Gregorio di Tours," *Cura di sé, cura del mondo. L'impatto della crisi ambientale sul fisico (sōma) e sul morale (psyché) dell'uomo. Atti della Giornata di Studi, Catania 30 giugno–1 luglio 2021*, ed. Rosa Loredana Cardullo, Gaetano Arena, and Liana Maria Daher (Milan: Le Monnier, 2022), 89–104.

quake hitting Lisbon in 1755 had as much of an impact on the public discourse³⁸ as the devastating tsunami affecting the entire Indian Ocean region in 2004.³⁹ However, it has always been a huge challenge to reflect in aesthetic terms on such catastrophes; it requires an emotional distance, a philosophical mind, and a deep ethical and moral investigation to come to terms with them in human terms.⁴⁰

It also deserves to be taken into consideration that people throughout history have tried hard to carve out their existence from the harshness of nature, creating fields, gardens, meadows, and pastures, while the wild forest regularly represented a major threat, a barrier, and a *terra ignota*, as the story of Adam and Eve in Genesis has already illustrated in most dramatic terms. However, the great desire to go hunting in the forest, pursued by aristocratic representatives throughout time, has then also changed that space and made it to a location for human pleasure and entertainment, while peasants, for instance, were increasingly barred from the forests, especially since the late Middle Ages and the early modern age.⁴¹

38 Jürgen Jacobs, "Auswirkungen eines Erdbebens. Zur Katastrophe von Lissabon 1755." *Zeitschrift für deutsche Philologie* 126 (2007): 185–197; see already Voltaire, *Poem upon the Lisbon Disaster*. Trans. Anthony Hecht (Lincoln, MA: Penmaen Press, 1977). For broader perspectives, see Harald Weinrich, "Literaturgeschichte eines Weltereignisses: Das Erdbeben von Lissabon," id., *Literatur für Leser: Essays und Aufsätze zur Literaturwissenschaft* (Stuttgart: Kohlhammer, 1971), 64–76; François Walter, *Katastrophen: Eine Kulturgeschichte vom 16. bis ins 21. Jahrhundert* (Stuttgart: Philipp Reclam jun., 2010).

39 Josef Haslinger, *Tsunami: A Report from Phi Phi Island*. Trans. by Thomas S. Hansen and Abby J. Hansen (2007; Riverside, CA: Ariadne Press, 2011). See also Urte Undine Frömming, *Naturkatastrophen: Kulturelle Deutung und Verarbeitung* (Frankfurt a. M.: Campus, 2006).

40 Christine Rinderknecht, "Der sechszwanzigste Dezember zweitausendundvier: Naturkatastrophen in der Literatur," *German Cultural News. Cornell Institute for German Cultural Studies* 17.2 (2008): 16–26; online at <http://hdl.handle.net/1813/11672> (last accessed on Dec. 6, 2023). See also Katharina Gerstenberger, "Surviving to Tell the Tale: Josef Haslinger's *Phi Phi Island* (2007)," *Ecozone* 3.1 (2012): 31–41; online at: <https://doi.org/10.37536/ECOZONA.2012.3.1.448>.

41 The seminal study remains the book by Robert Delort, *Les animaux ont une histoire*. Collection points (Paris: Éd. du Seuil, 1984); cf. also the contributions to *A Cultural History of Animals in the Medieval Age*, ed. Brigitte Resl. *A Cultural History of Animals*, 2 (Oxford and New York: Berg, 2007); see also Steven Wagschal, *Minding Animals in the Old and New Worlds: A Cognitive Historical Analysis* (Toronto: University of Toronto Press, 2019); John Aberth, *An Environmental History of the Middle Ages: The Crucible of Nature* (London and New York: Routledge, 2013); Susan Crane, *Animal Encounters: Contacts and Concepts in Medieval Britain*. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2012); Hannele Klemettilä, *Animals and Hunters in the Late Middle Ages: Evidence from the BnF MS fr. 616 of the Livre de chasse by Gaston Fébus*. Routledge Research in Museum Studies, 9 (New York and London: Routledge, 2015). See also the contributions to *Chasse: des hommes, des bêtes, des fables: pour l'exposition présentée sous ce titre au Musée d'Art et d'Histoire Fribourg du 22 octobre 2010 au 27 février 2011*, ed. Jean Steinauer. Textes

Human Interaction with Nature

There is virtually no scholarly or artistic field that would not be determined by the fundamental aspect of this interaction between human culture and the natural environment, even if some disciplines might be very esoteric and abstract, such as mathematics.⁴² But mathematical formulas mirror realities in nature and are not only imaginary. Of course, there is also the huge dimension of fantasy, which seemingly takes us out of our material reality. The pre-modern world knew much about that aspect; however, without a reference to the natural conditions on the ground, the difference between the real and the fantastic cannot be fully grasped.

Mystical visions, for instance, or the imagination of monsters, make sense only if they are embedded in a natural context for the contrast.⁴³ Already in antiquity, and then also since the late Middle Ages, people began to gaze out into the open space and tried to figure out what nature, people, animals, and culture might be like on the moon or on other planets. Fantasy and concrete astronomical studies soon merged and gave way to early modern cosmology.⁴⁴

Literary history examines texts; art history views visual documents; medical history studies the body and the changes in procedures in the healing process; musical history focuses on melodies or performances; religious studies reflect on

de Patrice Borcard (Baden: Hier + Jetzt, Verl. für Kultur und Geschichte, 2010). As to the bitter conflicts between peasants and the aristocrats in the early modern age regarding the privilege of utilizing the forest either for hunting or for economic purposes, see Hans Wilhelm Eckardt, *Herrschaftliche Jagd, bäuerliche Not und bürgerliche Kritik: zur Geschichte der fürstlichen und adligen Jagdprivilegien vornehmlich im südwestdeutschen Raum*. Veröffentlichungen des Max-Planck-Instituts für Geschichte, 48 (Göttingen: Vandenhoeck & Ruprecht, 1976); *Die Jagd der Eliten in den Erinnerungskulturen von der Antike bis in die frühe Neuzeit*, ed. Wolfram Martini. Formen der Erinnerung, 3 (Göttingen: Vandenhoeck & Ruprecht, 2000). For a solid summary and critical overview, see Jacqueline Stuhmiller, "Hunting, Hawking, Fowling, and Fishing," *Handbook of Medieval Culture: Fundamental Aspects and Conditions of the European Middle Ages*, ed. Albrecht Classen. 3 vols. (Berlin and Boston: Walter de Gruyter, 2015), Vol. 2, 697–721.

⁴² Jörn Sieglerschmidt and Birgit Biehler, "Natur," *Enzyklopädie der Neuzeit*, ed. Friedrich Jaeger (2006; Darmstadt: Wissenschaftliche Buchgesellschaft, 2008; reprinted multiple times), vol. 8, 1133–59; see also the contributions to *Der Naturbegriff in der Frühen Neuzeit. Semantische Perspektiven zwischen 1500 und 1700*, ed. Thomas Leinkauf. Frühe Neuzeit, 110 (Tübingen: Max Niemeyer, 2005). I have considerably profited from a lengthy exchange with Dr. Reinhold Münster, both concerning his contribution to this volume and the larger issues involved.

⁴³ *Imagination and Fantasy in the Middle Ages and Early Modern Times: Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 24 (Berlin and Boston: Walter de Gruyter, 2020).

⁴⁴ See the contribution to this volume by Reinhold Münster.

the various belief systems, etc. Yet, all those disciplines are, after all, predicated on the realization that we as human beings in our existence and in our actions, performances, and manifestations really interact with nature which is the all-encompassing framework of the entire existence. If we accept that premise, it seems rather strange that we have not yet aimed for a more intensive form of interdisciplinary research.

The critical topic that will be raised in this volume through many different perspectives and approaches pertains to the issue of how we become what we are as part of nature or how we are to understand the natural dimension of all existence. There is no way that we can ever divorce ourselves from nature, whether we are aware of it or not. This also means that all our lives have had a direct impact on nature, and vice versa because existence is incredibly intertwined, connecting all living creatures with one another. Oddly, in light of that, we face the curious situation that we have for far too long simply ignored the strongest forces in all of life. Nature speaks to us and we talk to nature in a myriad of fashions, but in most cases, we seem to utilize very distinct and foreign languages that cannot be understood by the other side, or we do not even attempt to talk to nature. In other words, throughout history, humans have tended to view nature as mute, irrational, blind, and unresponsive to any efforts to communicate. Considering the traumatic developments over the last few decades, we finally face the ultimatum to address each other and to comprehend that both nature and human society are partners within the same system that cannot survive if one side (human) remains or becomes exploitive, ruthless, selfish, and greedy.

Hence, all cultural history ultimately comes down to the understanding of the natural foundation of all material and spiritual conditions. However, this simplistic statement is deceptively easy and only indirectly truly straightforward. First, all human beings pursue different perspectives and comprehend reality in their own way, although there is, commonly, a broad consensus about the basic conditions of time and space, and the physical environment. Each culture, and so almost each individual, regards the natural world in a specific fashion, and comprehends it uniquely. Nevertheless, as a second point, that comprehension is predicated on the realization that we always look to nature and engage with it in the process of living. Even the notion of nature being 'outside' would be misleading in the current context because nature is both outside and inside of all existence, so any critical investigation ought to be as inclusive as possible, whether nature is viewed through an allegorical or a purely physical lens. For instance, all epidemics, all sicknesses brought upon people are the results of the working of bacteria and viruses, and nature could not care less about people's or animals' emotional or physical suffering because it is all a process and a transformation of existence.

The best approach to the questions raised here would hence be to acknowledge that all human perception and understanding are determined by the specific lenses applied that make us understand reality/nature in subjective terms. People often look at the same object, plant, animal, or rock formation and yet recognize very different things depending on their value system, their educational and cultural background, and their historical awareness. Our emotions and our cultural heritage deeply determine our perspectives. While in some cultures, certain animals, plants, or rocks are identified as divine in their nature, in other cultures, that is not at all the case.

Every ordinary object can assume a complex set of meanings, historical, moral, allegorical, or anagogical, depending on the circumstances. Many times, individual trees have enjoyed greatest respect because of their association with religious traditions, such as the linden (lime) tree, or the oak tree, but in other cultures, that is not at all the case. Hence, we can easily adapt a proverbial statement as a critical key for the analysis of cultural and natural history: ‘tell me what you see and I tell you who you are.’ Or, to put it differently, ‘tell me how you interact with nature, and I tell you who you are.’

The pre-modern world certainly perceived nature differently than we do, and this for many (good) reasons. After all, every animal, plant, or natural body offered signification for them (and should also for us).⁴⁵ There is always meaning. This immediately forces us to realize that the important question itself does not address the inner quality of natural objects, as relevant as that might be, but their meaning and symbolism, their allegorical or moral significance. Recognition of anything in this world depends on the categories available to us in epistemological terms. Of course, for most ordinary people throughout time, a tree was a tree with its leaves, roots, trunk, branches, and panoply, and nothing else. It could be used for shade, food, building material, or fuel. For a carpenter, the tree was critical as a source of wood. For the farmer, a tree, such as the oak tree, was a potential source of feed for the pigs (acorns). For travelers, a tree could provide a landmark or shade, and for lovers, a tree was a secret meeting place. Major trees were identified as sacred and became the central location for pagan religions, which the Christian Church then strongly battled from the early Middle Ages onwards (iconoclasm).

All this then quickly leads to the realization that natural objects carry meaning beyond the simple material dimension. It would be naive to assume that medieval philosophers such as Albertus Magnus (ca. 1200–1280) would have viewed nature only as a cameo appearance, as a fleeting stage which would have to be

45 Göttert, *Als die Natur noch sprach* (see note 34), 129–52.

measured in comparison with God, the afterlife, hell, purgatory, and heaven. But it is abundantly clear that nature was not simply nature for Albertus and his contemporaries in the scientific university community; instead, he utilized nature in its myriad of experiences as a platform for countless spiritual, ethical, religious, moral, and philosophical comments.⁴⁶

For poets, for instance, a linden tree symbolized love, as in the case of Walther von der Vogelweide's famous song "Under der linden" (Under the linden tree), because the lovers met there secretly, far away from society, and yet still in a safe distance to the wild forest and its hostile environment, hostile at least toward lovers – except in other cases, such as the anonymous Old French *Aucassin et Nicolette* (ca. 1240), where the lovers find each other in the dense forest and feel secure there from his father's persecutions.⁴⁷ The female voice in the Middle High German poem reflects on the utopian space under that lime or linden tree where her lover had prepared a bed of grass and flowers for their mutual enjoyment. She does not divulge what happened next, but the imprint of their bodies on the petals and grass was still visible, and the passers-by could perceive clearly what had taken place there. Sympathetic chuckling followed then, but the singer still hopes that their affair would remain a secret, as much as she sings publicly about her experience.⁴⁸

⁴⁶ Irven M. Resnick, and Kenneth F. Kitchell, Jr., *Albertus Magnus and the World of Nature*. Medieval Lives (London: Reaktion Books, Ltd., 2022); see also the contributions to *Albertus Magnus und die Anfänge der Aristoteles-Rezeption im lateinischen Mittelalter. Von Richardus Rufus bis zu Franciscus de Mayronis*, ed. Ludger Honnefelder, Rega Wood, Mechthild Dreyer, and Marc-Aëlko Aris. Subsidia Albertina, 1 (Münster: Aschendorff Verlag, 2005); *Approaches to Nature in the Middle Ages: Papers of the Tenth Annual Conference of the Center for Medieval & Early Renaissance Studies*, ed. Lawrence D. Roberts. Medieval and Renaissance Texts and Studies, 16 (Binghamton, NY: Center for Medieval & Early Renaissance Studies, 1982); Tullio Gregory, "La nouvelle idée de nature et de savoir scientifique au XIIe siècle," *The Cultural Context of Medieval Learning. Proceedings of the First International Colloquium on Philosophy, Science, and Theology in the Middle Ages – September 1973*. Boston Studies in the Philosophy of Science (Dordrecht: Springer, 1975), 193–218.

⁴⁷ Walther von der Vogelweide, *Leich, Lieder, Sangsprüche*. 15th rev. and expanded ed., newly edited by Thomas Bein (Berlin and Boston: Walter de Gruyter, 2013), no. 16, 126–27. For *Aucassin et Nicolette*, see now the (somewhat odd) English translation online at <https://quemarpress.weebly.com/books.html> (last accessed on Jan. 6, 2024).

⁴⁸ Heike Sievert, *Studien zur Liebeslyrik Walthers von der Vogelweide*. Göppinger Arbeiten zur Germanistik, 506 (Göppingen: Kümmerle, 1990); Otfried Ehrismann, *Einführung in das Werk Walthers von der Vogelweide*. Einführungen Germanistik (Darmstadt: Wissenschaftliche Buchgesellschaft, 2008). Considering Walther's enormous fame as one of the best Middle High German poets from the high Middle Ages, there is little wonder that there is a legion of relevant scholarly studies on his work.

Nature often tends to be highly scary and dangerous for human beings because it can be hostile and threatening, being much more powerful than humans can ever even imagine, whether we think of a tsunami, the eruption of a volcano, earthquakes, forest fires, high surf, etc. It all depends on the circumstances because the opposite can also be the case, such as when lovers meet in a dale, when flocks spend time on a pasture, when spring comes back to revive dormant life and invites people to enjoy themselves outdoors. To study the history of the interaction between nature and human society, we can easily turn to literary evidence that has consistently served as a first-rate narrative mirror because the protagonists have to operate in some kind of space, hence nature. This greatly complements what data we can cull, for instance, from pre-modern art works, scientific treatises, or scientific facts provided by archaeologists or dendrologists. In other words, the topic of nature itself invites or rather necessitates interdisciplinary approaches.

For instance, in the fourteenth-century Middle English alliterative romance, *Sir Gawain and the Green Knight* (1387?), the protagonist has to search for the Green Chapel where he has to submit himself to the Green Knight who would be entitled to chop of his head as part of their wager. The year before, the latter had offered that grisly deed to anyone at King Arthur's court, and Sir Gawain had eventually agreed to take on that challenge. Of course, the Green Knight survives by means of magic, and later, he does not kill Gawain either, only nicking his neck a little, which serves as a reminder that he had not completely fulfilled his part of their agreement to exchange what they would have conquered during the day.⁴⁹ In that case, Gawain had kept the green belt granted him by his lady which would save his life. But Bertilak, the Green Knight, does not really chastise his opponent or even team player, if that might be the right word, and rather acknowledges that everyone wants to live and does whatever it takes to survive: "But because you loved your life; thus the less I blame you" (2368).

When Gawain traverses the wild winter landscape of northern Wales, he almost freezes to death, has to fight against wild animals and other creatures, and spends days all by himself when he finally arrives at Castle Hautdesert where he receives a warm welcome. Crossing that forest would have almost killed him due to the extremely cold temperatures:

⁴⁹ *Sir Gawain and the Green Knight: A Dual-Language Version*, ed. and trans. by William Vanuono. Garland Reference Library of the Humanities, 1265 (New York and London: Routledge, 1991); for numerous innovative insights as to the dating of the text and the identification of Sir John Stanley (d. 1414) as the Gawain poet, see now Andrew Breeze, *The Historical Arthur and the Gawain Poet: Studies on Arthurian and Other Traditions*. Studies in Medieval Literature (Lanham, Boulder, et al.: Lexington Books, 2023).

When the cold, clear water scattered from the clouds,
 And froze before it fell on the faded earth.
 Nearly slain by the sleet, he slept in his armor
 More nights than enough, among naked rocks,
 Where, clattering from the crest, the cold stream runs,
 And hung high over his head in hardened icicles (727–31).

Even the Green Chapel where he has to meet the Green Knight represents a horrifying location, irrespective of the religious purpose of the building. As Gawain comments, “This oratory is ugly, overgrown with herbs; / It favors that freak fashioned in green / To drone his devotions to the devil here” (2189–91). Curiously, however, Gawain ties his horse to a linden tree (2176), which here serves a very different purpose than in Walther’s love song. Every element in nature hence means something unique, all depending on the circumstance and individual approaches. Although the locale at the Green Chapel seems to be the endpoint of life, being dreary, remote, dilapidated, and freezing, it is also the site of Gawain’s survival, recovery, and realization of his human nature in its frailty and selfishness, the ultimate desire to live.

Nature might seem brutal, reckless, and careless, not giving any credit to human desires, but in reality, it is part of us, after all, whether we recognize that or not. Gawain had to lose some blood from the neck wound, and that blood represented life, in its red color on the white of the snow. At the same time, he wears the green belt, which is life, and he is finally allowed to keep it because it represents an honorable symbol, even in face of Gawain’s failure to uphold the wager with Bertilak, the owner of the splendid castle where he had spent the Christmas season before facing the threat of being decapitated.

That wager itself underscores dramatically the close interaction between the natural world with its animals (and magic) and the courtly sphere where Gawain is literally hunted by Bercilak’s wife upon her husband’s instigation to test the protagonist’s honor, virtues, and knightly prowess. Each of the three animals represents, so to speak, the knight’s personal skills, but only to some degree. The deer’s speed, the boar’s strength, and the fox’s skills are the same with which Gawain defends himself against the lady, but she fails to achieve her goal because he is too mindful of being a guest in that castle and of the wager. Morality and virtues intercede against natural sexual desires and the forces exemplified by the animals, in Gawain.

He grants her kisses, but nothing else, except that he takes the green belt as a gift from her. That means, as a cultured and highly sophisticated individual, he can, we may say, supersede the basic natural forces (sexual desire) and control himself. Only when she dangles in front of his eyes real hope for his life by means of the belt, does he submit to her temptation. The animal is finally caught,

so to speak, and Gawain will have to pay for this at the Green Chapel, but only with a nick in his neck. Significantly, once he has survived and learns that the Green Knight had only ‘played’ a nearly deadly game, does he return home, but this rather quickly, since the narrator spends hardly any time on describing the natural environment which he encounters en route since the main topic has already been addressed and would not need any further elaborations: “But I do not intend to tell all the tales at this time” (3483).

Of course, we could also consider to what extent the Green Knight and Morgana the Fay who had provided him with the magical power not to suffer any real harm in the decapitation scene, constitute nature in its essential character, including magic and necromantic forces. The challenge of King Arthur’s court would thus have to be seen as a battle between human culture and nature, though both are intimately intertwined and depend on each other. After all, Sir Gawain almost freezes to death during the cold winter nights, whereas on his way home to Arthur there are no comments on any suffering. Moreover, Gawain’s opponent, Bercilak, hunts in a symbolic fashion three animals, which all become symbols of Gawain’s personal skills and also challenges by Bercilak’s wife. As much as Gawain is resting in his bed, the danger of nature is waiting for him, here represented by the wife’s sexual seduction attempts and the exchange of the prey each of the two men have gained during the day. Finally, the critical decapitation scene at the end takes place at the Green Chapel where frozen nature, Christianity, ancient magic, and human communication interact with each other. Below, I will return briefly to this major alliterative romance to situate it in a slightly different context.

Topology of Nature: Ernst Robert Curtius

None of those issues were truly new in the late Middle Ages. On the contrary, the entire discourse on nature can be traced back to classical antiquity, as Ernst Robert Curtius had demonstrated in his seminal study *European Literature and the Latin Middle Ages* (1948). In fact, already in antiquity, some of the key questions had pertained to the relationship between the gods and *natura*, and early medieval theologians picked up that theme of power yielded by nature over people, whether we think of late antique Lactantius (ca. 250–ca. 325) or early medieval Prudentius (d. after 425). Consistently, theological authors emphasized that nature was not the creator of life, only the sustainer, as powerful as she operates espe-

cially over human life.⁵⁰ As Curtius observes, summarizing his comparative analysis, “Ancient vegetation cults seem to have coalesced with the symbolism of the Eucharist in late Antiquity and to have survived esoterically into the Middle Ages.”⁵¹ However, by the high Middle Ages, Nature was no longer recognized as a goddess by herself; instead it was perceived as “life nourished by the springs of life itself.”⁵² Discussing Alan of Lille (ca. 1128–1202), Curtius notes that in the scholar’s mind, Nature is only God’s pupil and is contingent, i.e., knows birth, whereas God does not know contingency being the creator of all life. In this sense, according to Alan, “Nature remains the intermediate power between God and man, but she humbly subordinates herself to God. She is no longer the fruitful mother but the modest maiden” (119). However, she still aims for the creation of the perfect human being (120), rallying all of her forces. As Curtius then summarizes, “Her function in the twelfth century view of the universe . . . must be understood as an attempt to find a place in the divine order for the forces and drives of life” (121).

Not surprisingly, in the subsequent centuries, many philosophers and poets reflected on the generative power of nature and promoted the idea that celibacy was not acceptable for humans since it would go against God’s own command in Genesis, a direct attack against the strict rules by the Church since the Gregorian reform in the eleventh century (126–27).

In a later chapter, Curtius reflects on the meaning of exotic fauna and flora as they found expression especially in early medieval art and literature; he emphasizes that the common images and notions were mostly imported from the classical world around the Mediterranean (184). But does that consequently entail that artists and writers had closed their eyes to the natural world and kept in mind only the models that they had learned in school? With respect to literature, was that the case from Homer to Shakespeare and later (185)?⁵³ Indeed, we can

50 Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, trans. from the German by Willard R. Trask. Bollingen Series, XXXVI (1948; Princeton, NJ: Princeton University Press, 1955, 1983, 1990), 106–08.

51 Curtius, *European Literature* (see note 50), 112.

52 Curtius, *European Literature* (see note 50), 113.

53 See now for new critical perspectives on the famous German Baroque poet, Martin Opitz, the contribution to this volume by John D. Pfizer. His study could be easily used as a model case for further investigations of late medieval and early modern German and other western literature, where nature, such as the forest, increasingly, or continuously, mattered critically, such as in the various versions of the *Melusine* topic (Jean d’Arras, 1393; Couldrette, ca. 1400; Thüring von Ringoltingen, 1456; see Albrecht Classen, *The Forest in Medieval German Literature* (see note 34); id., “The Role of the Forest in German Literature: From the Medieval Forest to the *Grünes Band*. Motif Studies and Motivational Strategies for the Teaching of the Middle Ages,” *Journal of Literature and Art Studies* 4.3 (2014): 149–64, online at: <http://www.davidpublisher.com/index.php/>

certainly observe that and recognize thereby the effort to demonstrate one's high level of education: "The pastoral world is as extensive as the knightly world" (187). Nevertheless, we would have to be careful, against Curtius's claims, to dismiss all representation in medieval art and literature as nothing but reflections of classical models. That would be tantamount to throwing the proverbial baby out with the bath water. Even though Curtius then quotes from Goethe's *Faust* (Act 3:21), confirming the long reach from antiquity to the nineteenth century, the poetic effort to project an idyll would not mean that the specific natural elements would not be realistic at all. Literary dreams aim, to be sure, for an alternative world, but they are still predicated on naturalistic observations, as much as they then might be transformed within the fictional framework. As influential as classical rhetoric certainly was, in contrast to Curtius (192–93) I suggest that the material conditions did not simply disappear.

This is not to deny that stylistic elements continued to hold sway throughout the centuries and have probably done so until today. The reference to the linden tree, as observed above, confirms this, although that tree is very common throughout Europe, and has been for thousands of years. Curtius, however, emphasizes the model character of natural scenes, such as the mixed forest (194–95), the *locus amoenus* (195–200), and the epic landscape (200–02). But would we thus have to accept that standard images would not have roots in the material conditions? It is one thing to identify rhetorical concepts, and it is another thing to claim that those simply replaced reality. The middle ground would probably be the right path through that epistemological thicket, the route which this volume intends to endeavor to follow, identifying notions of nature from the entire Middle Ages and the early modern age. The concept of 'nature' will here gain a much wider scope than is usually the case, taking us into the depth of the human body and to the planets in outer space.

After all, Curtius himself admits in a later chapter that the metaphor of the 'book of nature' mattered greatly already in the high Middle Ages and was not at all an invention of the Renaissance period. Referring to Hugh of St. Victor, he comments, "Both the creation and the God-Man are 'books' of God" (320), though he then also hastens to add that "all earthly things are prefigured as in a transcendent book" (320). The critical task then is defined by one's ability to read nature properly, that is, to read beyond the material level and to penetrate deeply

Home/Article/index?id=1874.html. Translated into Spanish as "El Papel del Bosque en la Literatura Alemana: Desde el Bosque Medieval a la Banda Grúnes: Estudios de Motivos y Estrategias Motivacionales Para la Enseñanza de la Edad Medieval," *Cosmotheoros* 2.2 (2022): 103–27; id., *Water in Medieval Literature: An Ecocritical Reading*. Ecocritical Theory and Practice (Lanham, MD, Boulder, CO, et al.: Lexington Books, 2018).

into the spiritual dimension. That is also nature but metamorphized. Summarizing John of Salisbury, Curtius states: “In the book of our reason are inscribed not only pictures of things but also the divine ideas” (320), which finds many reverberations in subsequent philosophies, such as that of Bonaventura and even in the writings by naturalists and encyclopedists such as Thomas de Cantimpré (1201–1272) and Konrad of Megenberg (1309–1374), and even much later by the medical doctor and spiritualist Theophrastus Paracelsus (ca. 1493–1541).

Curtius’s main concern focused on demonstrating the long-term continuity of images, concepts, tropes, and topoi from classical antiquity to the nineteenth century; in detail he certainly recognized fundamental aspects regarding nature as formulated by many different medieval philosophers and theologians: “The wisdom of God, then, is displayed particularly in the smallest creatures” (323). This finds its powerful confirmation in the reflections by the English philosopher Sir Thomas Browne (1605–1682) according to whom “there are two Books from whence I collect my Divinity: besides that written one of God, another of His servant Nature, that universal and publick Manuscript, that lies expan’d unto the Eyes of all” (323). Very similarly, Francis Quarles (1592–1644), John Milton (1608–1674) and Thomas Vaughan (1621–1666) recognized the world as a book that needed to be read so that the individual would find his/her way toward God. That notion was not lost for earlier and subsequent thinkers, such as Montaigne (1533–1592), Edward Young (1683–1765), and Voltaire (1694–1778). The German poets Herder and Goethe certainly learned from their predecessors and continued with that specific discourse on nature as a text written by God. As some of the contributors to the present book indicate, that religious notion was already very present in early modern theological writings, such as by Johann Arndt (1555–1621), whose concept of nature is the topic of Thomas Willard’s contribution.

Critical Perspectives, Today and in the Middle Ages

In their comprehensive study dedicated to medieval landscapes, Derek Pearsall and Elizabeth Salter pursue fairly similar approaches and reiterate or deepen the global comments by Curtius, although they pay only lip service to his seminal study (46–47).⁵⁴ In many ways, however, they examine primarily medieval material and

⁵⁴ Derek Pearsall and Elizabeth Salter, *Landscapes and Seasons of the Medieval World* (London: Paul Elek, 1973).

study it very closely as expressions of paradise (God's garden) or the *terra Babylonis* (hell). Similarly, as does Curtius as well, they observe the huge impact of classical literature on the medieval poets in their efforts to describe landscapes or natural elements. It makes good sense to identify in those passages not some endeavors to create a 'photographic' mirror of reality but strategies to explore the spiritual meaning behind it. The early and high Middle Ages were direct heirs to that classical tradition which we find hidden behind stylized and adapted images and forms. Both artists and poets learn their models and subsequently work out their own style and expression, though the models never fully disappear (36), irrespective of the appearance of constant changes reflecting the course of time and hence the constantly changing tastes, styles, models, and concepts concerning nature and the human interaction with the natural environment.

As Pearsall and Salter aver, "The insignificance of landscape, in any form, in the native vernaculars reinforces the generalization about the sophisticated and particular provenance of a taste for landscape" (41). It is certainly true that early medieval artists and poets hardly paid major attention to the natural vistas. But this does not mean that they were ignorant about it or disregarded it altogether. The evidence of the eleventh-century Latin *Waltharius* (The Song of Walther) contradicts this to some extent.⁵⁵ When Waltharius flees from the kingdom of the Huns, he has to watch out carefully not to be seen, so he and his beloved Hildegund, daughter of the Burgundian King Heretic and also a pawn in Attila's hands, have to hide in the forest during the day and walk at night: "They flee the villages and leave behind the beautiful fields, following their winding, curved path through uncut mountains, they turn their nervous steps this way and that through the pathless wild" (69, chapter 347). When they reach the great Rhine River in what we call western Germany today, they need a ferryman to take them across the water, and Waltharius pays with fish he had caught before and which are not native to that part of the world (77, chapter 428). Unfortunately, those fish then betray them to King Gunther in the city of Worms since those are unknown there.

Hagen, the pawn from the Frankish kingdom, Waltharius's old companion who had escaped a bit earlier and is now working in the service of the Burgundian king, delights about the prospect that his friend has arrived, having returned from his exile, whereas Gunther can only think of the gold that he might win from the stranger (79, ch. 464). The king's only thoughts are to overpower the lone man and to take his gold and the maid. But Waltharius has by then reached

⁵⁵ *Waltharius*. Edition, trans., and intro. by Abram Ring. Dallas Medieval Texts and Translations, 22 (Leuven, Paris, and Bristol, CT: Peeters, 2016). See now Albrecht Classen, "An Ecocritical Reading of an Early Medieval Heroic Epic: *Walthariuslied*," *Sankalp Journal of Multidisciplinary Studies* 4.1 (2024): 5–19; <https://sankalppublishing.com/wp-content/uploads/2024/03/SJMS-Vol-4-Issue-12024-02.pdf>.

a point further to the west, which the narrator describes in remarkable details: he “came then into the forested valley called Vosges – it is a huge, broad wood which holds countless haunts of wild beasts and is frequently home to the noise of the hounds and horns of the hunt” (81, ch. 489). In a cave, he settles for the night, and it soon becomes a fortress for him when Gunther and his band of men arrive to challenge him. Against all their expectations, Waltharius is able to kill all warriors sent his way, and only when Gunther forces Hagen to attack the foreigner the next day after he has left the cave to get on his way, do all three get seriously wounded, which then ends the fighting in rather morbid laughter.

As curt as the narrator certainly is, he still describes in great intensity and detail the natural environment, the path which the fugitives take: “while the path of the confined trail pierced onward, checking everything around him with clear eyes, he caught the airy wind in his ears, pricked to see if he could hear any whispers, footsteps, jangling bridles or haughty men” (145, ch. 1203). The battle itself does not concern us, but we can turn to the end of the epic poem where the geographical dimension comes into play again, with the narrator providing us with a clear sense of orientation: “the Franks returned to Worms, and the Aquitanian came to his homeland” (161, ch. 1443).

There are not many specific elements of nature here, and yet, the poet made specific efforts to present the physical background very vividly, whether it's their hiding in the woods, the crossing of the Rhine, or the battle in the Vosges during which the protagonist takes full advantage of the natural setting to defeat his opponents. Those elements are important for the narrative development, but they also confirm that the poet had clear concepts of physical space and the natural environment that can be precisely traced on a map. There are no classical models, no tropes, or topoi; instead, the *Song of Walther* signals unequivocally that alternative perspectives regarding nature were possible already in the early Middle Ages, simply depending on the genre, the context, and the poetic intention. The evidence of medieval artwork might tell us a different story, of course. However, much of early medieval art was specifically commissioned by members of the Church and served very concrete purposes that had nothing to do with any reflections of the natural world. Only in the course of the later centuries did an element of considerable realism enter the ‘picture,’ literally speaking, and then the physical dimension suddenly mattered as well, or much more than before.

Pearsall and Salters struggle with the striking elements of realism in Old English poetry, such as in “The Seafarer” or in *Beowulf*. The fact of those realistic features cannot be denied, but they suggest, although it sounds a bit contorted or forced, that we should perhaps

see the realism as ‘typological’, as that term is used in biblical exegesis; in other words, the poet’s description of the winter seas is valid in terms of natural reality and personal experience, but that validity is subsumed in a larger purpose which concerns itself with spiritual and conceptual truth. (42)

If we were to accept such an approach, then we might never find any traces of realism, not in the Middle Ages, and not in the Renaissance, and also in later centuries. Of course, Sir Gawain experiences the winter forest both concretely and symbolically,⁵⁶ otherwise we would not even need a literary text or a piece of artwork since every element there carries a symbolic meaning. As Pearsall and Salters claim: “Natural description in *Beowulf* is always charged with dramatic force, is always the symbol of some pattern of thought or feeling” (44). However, without the grounding in the realistic world which the poet or the artist then transcends, all this nature imagery would not make full sense. Everything has to be anchored in something natural, and from there we can proceed with our exploration of the deeper meaning. Even the most spiritual, ethereal topics, such as pertaining to angels or the divinity, are determined by naturalistic features, or at least through a negative contrast. Otherwise, the otherworldly component would not be visible since the contrast would be missing.⁵⁷

Why the two authors then suddenly credit the Old Icelandic sagas, such as *Egil’s Saga*, with being “compellingly real” (45), or why they claim that “[l]and is described according to its use, not its beauty” (45), does not sound fully convincing, especially because Egil’s difficult journeys to the North cast specific light on his performance. We cannot escape the force of symbolism but should also not succumb to completely symbolic readings in medieval literature.⁵⁸

Much more specifically than Curtius, Pearsall and Salters draw concrete lines between classical rhetoric, such as Quintilian’s theory or the Ciceronian *Rhetorica ad Herennium*, and we can only agree with them that many topoi from antiquity made their way into medieval literature and art, such as the *locus amoenus* or the *hortus conclusus*. However, when we consider their visual example, “The Virgin and Unicorn in an Enclosed Garden,” Fitzwilliam Museum, Cambridge, MS 99, f. 11v, from the early sixteenth century, we discover much more than only a topical landscape with the Virgin Mary seated in the garden, reading the Scriptures, while a white unicorn has placed its horn onto her lap. On the one hand, the sym-

56 Albrecht Classen, “Winter as a Phenomenon in Medieval Literature: A Transgression of the Traditional Chronotopos?,” *Mediaevistik* 24 (2011): 125–50.

57 For a rather different reading, see the contribution to this volume by Fidel Fajardo-Acosta.

58 See the contribution to this volume by Marialuisa Caparrini who examines Old English concepts of northern Europe.

bolic scene is certainly also determined by many realistic features, such as the tower and a gate, plus the vista toward the landscape in the background. The sense of space is unmistakable. Moreover, the frame is filled with highly realistic images of flowers, a moth, a butterfly, and seedpods. They certainly carry symbolic meaning, but they also represent concrete objects, depending on the level of reading the spectator was capable of carrying out.

Courtly love poetry operated without any doubt within the framework of standard topoi and tropes, and courtly romances project idealized landscapes, but in the late Middle Ages, the economic conditions change, meaning that forests, for instance, were increasingly cleared for many different purposes.⁵⁹ For Pearsall and Salters, that had the consequence that poets reflected differently on forests in the course of time (53), but we can easily move to the early sixteenth century to find dramatic examples of literary texts where the forest represented a dangerous, dark, impenetrable, and fearsome space, such as in the various *Melusine* novels (Jean d'Arras, 1393; Couldrette, ca. 1400; Thüring von Ringoltingen, 1456) or in the anonymous *Fortunatus* (1509).

Generalizing statements, as they dominate the study by Pearsall and Salters, prove to be risky and do not help us much in tracking down the unique perceptions of nature in different art and literary forms at different times. It seems problematic, for instance, to claim that the experience of enclosure became a more common feature of the late Middle Ages (54), which certainly ignores, for instance, the rich corpus of Books of Hours, or also many romances. It all depends on the text selection or the choice of specific art works to make such global claims that "the Middle Ages tend to close off the view and to hedge round the garden" (54). That element certainly exists, but we cannot simply generalize from some religious examples, showing us the Virgin Mary in her enclosed garden.

Other topics covered by Pearsall and Salters are the landscape of Paradise, the enclosed garden (once again), the landscape of the seasons (Book of Hours), and late medieval evidence. One fundamental problem both here and in the case of Curtius seems to be the desire to trace a cultural-historical process, to determine when a paradigm shift occurred in the observation of nature, and when symbolism was gradually replaced by realism. Globally, of course, conditions changed, and we can certainly identify major transformations in the perception of the natural world. However, it seems too stark to claim binary oppositions and either-or situations. If we want to understand the relationship between human society and the natural environment also in the pre-modern period, we ought to be much more flexible and open-minded in our perception of the relevant documents.

59 Albrecht Classen, *The Forest in Medieval German Literature* (see note 34).

Pearsall and Salter certainly recognized a progressive opening toward nature, especially as reflected in late medieval Books of Hours, and they correctly conclude:

Paintings such as this [the *Grimani Breviary*, ms. Lat. I 99 = 2138, Biblioteca nazionale marciana, Venezia, ND3365.G7 B74 2009q, with ca. 120 full-page miniatures of both sacred and secular subjects, was purchased by Cardinal Domenico Grimani in 1520], of tangled undergrowth and sharply etched trees, of shaded skies and obdurate winter crags, must have prepared the way for Bruegel's dark and powerful essay on man, beast and season, *The Return of the Herd* (160).⁶⁰

Late Medieval Visual Depictions of Nature

Throughout time, humans have faced dramatic challenges by nature, whether we think of earthquakes, tsunamis, wildfires, volcanoes, floodings, droughts, or the cataclysmic impact of meteorites. We depend on the sun and on water, but both can also threaten our lives when present in excess, apart from bacteria and viruses, which have brought about many pandemics throughout time, worst, perhaps, the Black Death (ca. 1347–1351, and many times thereafter, the Spanish Influenza, Ebola, and now COVID-19.⁶¹

Late medieval and early modern artists increasingly turned their attention to nature and delighted their viewers with ever more details about the physical settings of the events described in the texts. Of course, for a very long time, topological models continued to dominate, such as the rocky background, distant hills, a standard selection of trees, a few flowers, and occasional bodies of water. A par-

⁶⁰ Albrecht Classen, "Rural Space in Late Medieval *Books of Hours*: Book Illustrations as Looking-Glass into Medieval Mentality and Mirrors of Ecocriticism," *Rural Space in the Middle Ages and Early Modern Age: The Spatial Turn in Premodern Studies*, ed. Albrecht Classen, with the collaboration of Christopher R. Clason. *Fundamentals of Medieval and Early Modern Culture*, 9 (Berlin and New York: Walter de Gruyter, 2012), 529–59.

⁶¹ Jacques Berlioz, *Catastrophes naturelles et calamités au Moyen Âge*. Micrologus' library, 1 (Florence: Sismel, 1998); *Natural Disasters, Cultural Responses: Case Studies Toward a Global Environmental History*, ed. Christof Mauch and Christian Pfister. The German Historical Institute Studies in International Environmental History (Lanham, Boulder, et al.: Lexington Books, 2009); Stuart B. Schwartz, *Sea of Storms: A History of Hurricanes in the Greater Caribbean from Columbus to Katrina*. The Lawrence Stone Lectures, 6 (Princeton, NJ: Princeton University Press, 2016); *The Experience of Disaster in Early Modern English Literature*, ed. Sophie Chiari. Routledge Studies in World Literatures and the Environment (New York and London: Routledge, 2022). See also the contributions to *Les catastrophes naturelles dans l'Europe médiévale et moderne*, ed. Bartolomé Bennassar (Toulouse: Presses universitaires du Midi, 2019); Lori Jones, *Patterns of Plague: Changing Ideas about Plague in England and France, 1348–1750*. Medical Services Studies in the History of Medicine, Health and Society (Montreal and Kingston: McGill-Queen's University Press, 2022).

ticularly attractive example proves to be one of the manuscripts of Countess Elisabeth von Nassau-Saarbrücken's *Hug Scheppel* (Universitätsbibliothek Hamburg, Codex 12 in scrinio), where a miniaturist added almost on every page a fairly large image showing us various scenes. Modern realism cannot yet be expected, but the artist made a significant attempt to depict forests, meadows, geophysical features, and fields in a surprisingly realistic fashion, although we still would misread his art if we were satisfied with assuming that he intended to work with nature for its own sake. Allegory, metaphors, tropes, as we are familiar with them in the literary discourse, also mattered in the visual arts. This means, we have to be really careful with a factual, perhaps positivist reading of the elements in these miniatures.⁶²

On fol. 2r of this manuscript, for instance, we see the protagonist on horseback waiting in the open, whereas a group of his enemies is hiding in a dense grove of trees. None of those reflect real trees, having no branches, but a trunk and a top, signaling the density of the forest. The passageways are always marked by footprints. In the background, a medieval city emerges, surrounded by a strong wall and towers as protective elements. Even here we can identify the artist's sharp eyes since the houses are presented highly realistically.

The scenes then change, corresponding to the narrative development, but the natural elements do not, even if the artists rearranged them to fit the specific circumstances (e.g., fol. 4r). At times, the forest completely dominates the scene (fol. 4v), and at other times, it is the architectural setting that occupies the image (fol. 5r). Occasionally, the observer is invited to focus on a specific location within a castle, but we still notice a body of water outside the city wall where a swan is floating and looking for food, bending its head into the water (fol. 6r). Even when the image is seemingly entirely occupied with the events as they occur in the court, the upper frame takes us far beyond the castle out to the countryside where we notice various types of fields for grass and grain (9r). It is also worth noting that the artist painted dark smoke coming out of the chimneys as a result of heating the chambers in the castle, a rather uncommon feature in miniature illustrations.

The following pages contain fewer images, but those that are included prove to be just as impressive due to the meticulous design, excellent colors, and a massive number of details, such as the scene showing a siege, which one army camped outside, and another in the process of leaving the city to engage with the enemy (16v). Although the artist concentrated on the military aspects, he still did not ignore the agricultural background, to be seen at the top edge of the image

⁶² I would like to thank Dr. Katrin Janz-Wenig from the Staats- und Universitätsbibliothek Hamburg Carl von Ossietzky for allowing me rather unbureaucratically to study this manuscript *in situ* without having made a reservation. It is also available online.

(very similar also on fol. 18r). The opposite can also be the case, with the landscape and the fields dominating the scene, while the besieged city and the hostile military camp enjoy less emphasis (fol. 19v). We observe a particular emphasis on the agricultural setting, and the top portion of the picture is occupied by the sea and a number of ships floating along, with only one harbor to be seen.

The artists obviously enjoyed highlighting, as did many of his contemporaries, the cliffs leading up to hills beyond the plains and the central city (fol. 31r). Everything is compartmentalized, so we can clearly detect the various types of fields, parts of the elevations, meadows, forests, valleys, villages, and roads. Considering the masses of troops regularly appearing in these miniatures, we might feel reminded of modern images in the books titled *Where is Waldo* (for children) (fol. 36v). But on other occasions, the artist's eyes turned to the density of the forest although again branches are normally missing (fol. 44r).

The miniature on fol. 48r offers a rather unusual perspective since the viewer is invited to look upon the top of the forest, although the little house to the bottom right is shown again from the side. The miniature on fol. 49v depicts, which is highly unusual here, forest animals (mostly deer) who have come out of their hiding places and begun to drink water from the sea right at the edge of the forest. The fields on the left top are concretely marked by trees to separate them from the others. On fol. 50v, the artists made a deliberate effort to mirror the river's curvy movement down toward the sea. We can also recognize the furrows of the fields, next to meadows. Undoubtedly, we are invited to pay respect to the landscape, both wild and domesticated, that is, to the forests and the agricultural lands, without losing sight of the cities, castles, and often the masses of soldiers prepared for war.

The same manuscript also contains Elisabeth's *Königin Sibille*, but although there are many empty places for planned miniatures, those were apparently never realized. The scribe left enough room for fairly large images, so those miniatures had been intended to be included. We do not know whether money ran out or whether the artist had passed away.

Altogether, this artist had a clear perception of nature, which he depicted highly realistically and yet also according to model images. There is simply order; every piece has its proper location. Neither the forests nor the agricultural fields encroach upon each other. There are cities, castles, villages, occasionally some farmhouses, and all parts of those charming landscapes are connected with pathways good enough for any horseman. Typical of late Gothic art, each painting is characterized by diverse landscapes, with hills and valleys, oceans and forests, cities and villages. The naturalist in the artists obviously delighted in forests, fields, meadows, and occasionally bodies of water with swans swimming in them. No doubt, as we can find similar representations also in countless contemporary

Books of Hours, there are many iconographic templates predicated on fruits, plants, flowers, butterflies, and other natural elements.⁶³ The examples from the late Middle Ages demonstrate a considerable intensification of the realistic panoply, but the genre itself invited, from early on, a specific engagement with nature as the expression of divine forces.

Significantly, the text itself, *Königin Sibille*, contains important references to the forest, so when the queen tries to escape from the potential rapist, the courtier Markair, who has already killed her protector, the knight Abrye von Mondidir, and his horse – he never manages to kill the dog which then leads ultimately to his demise through an ordeal with the dog who can force Markair to admit his guilt. When Sibille realizes that the evil man wants to rape and kill her, she races away through the forest, rides the whole night, so the perpetrator cannot find her.⁶⁴

We also come across wonderful examples for this phenomenon in late medieval fresco art, such as in the large panels of a retablo (retable) from the cathedral in Ciudad Rodrigo west of Salamanca which are now in the possession of the Museum of Art at the University of Arizona in Tucson, part of The Samuel H. Kress Collection since the early 1950s. The twenty-six panels still extant today were produced between 1480 and 1488, and after 1493 by the artists Fernando Gallego and

⁶³ Art historians have already discussed this genre from many different perspectives; see, for instance, Celia Fisher, *Flowers in Medieval Manuscripts* (Toronto: University of Toronto Press, 2004); Sylvia Landsberg, *The Medieval Garden* (1996; Toronto: University of Toronto Press, 1998); Liz Herbert McAvoy, *The Enclosed Garden and the Medieval Religious Imaginary*. Nature and environment in the Middle Ages, 4 (Woodbridge, Suffolk: D. S. Brewer, 2021); Kathryn M. Rudy, *Image, Knife, and Gluepot: Early Assemblage in Manuscript and Print* (Cambridge: Open Book Publishers, 2020); Ina Nettekoven, *Das Stundenbuch der Herzogin Philippa von Geldern: Jean Coene IV. und die Buchmalerei in Paris um 1500* (Berlin and Munich: Deutscher Kunstverlag, 2023); Albrecht Classen, "The Book of Hours in the Middle Ages," *Futhark: Revista de Investigación y Cultura* 2 (2007): 111–29; id., "Rural Space in the Middle Ages and Early Modern Times: A Significant Domain Ignored For Too Long by Modern Research?," *Rural Space in the Middle Ages and Early Modern Age: The Spatial Turn in Premodern Studies*, ed. Albrecht Classen, with the collaboration of Christopher R. Clason. Fundamentals of Medieval and Early Modern Culture, 9 (Berlin and New York: Walter de Gruyter, 2012), 1–191.

⁶⁴ *Königin Sibille. Hugu Scheppel: Editionen, Kommentare und Erschließungen*, ed. Bernd Bastert and Ute von Bloh. Texte des späten Mittelalters und der frühen Neuzeit, 57 (Berlin: Erich Schmidt Verlag, 2018), 13. Bastert and von Bloh do not believe that Elisabeth was competent enough to create those German translations; hence they left out her name. I would disagree with that for a number of reasons. See now Albrecht Classen, "The Beloved Dog in Medieval and Early Modern Literature: More than a Domesticated Animal and a Simple Pet," to appear in *Uomini e animali fra Antichità e Medioevo. Il domestico, il selvatico e il fantastico / Humans and Animals between Antiquity and the Middle Ages. The Domestic, the Wild and the Fantastic*, ed. Margherita Cassia. Communitas. Quaderni di filologia, storia e archeologia (Catania, Italy: Quasar Editions, forthcoming).

Maestro Bartolomé, and their workshops. The style is clearly Hispano-Flemish, and those paintings are today considered to be some of the prime masterpieces of late medieval Spanish art.⁶⁵

Contemporary Flemish and German artists intensively contributed to the exploration and discovery of nature in visual terms, whether in Books of Hours, in psalters, in didactic texts, manuals, or religious narratives. A few of the countless examples available until today must suffice here to demonstrate the almost unquenchable desire to explore the natural world. In an illustrated copy of Augustine's *Cité de Dieu* (City of God) from Bruges ca. 1445, we find, for instance, a page depicting St. Augustine as a teacher on the left, sitting on a throne and addressing a group of clerics, while on the right, Clovis receives the fleur-de-lis from heaven.⁶⁶ As is often, if not regularly the case, the image is surrounded by a virtual flood of natural objects, whether leaves or flowers, berries and leaves, birds and trees, with the images having probably been copied from model books. Amidst this almost impenetrable thicket of a natural world, we find not only two angels, but also two horsemen, one on the right turned toward the image in the central panel, and one at the bottom apparently looking upwards. In the top margin, a veiled lady is seated reading a book, perhaps a psalter or the Bible. The image itself depicts the central scene with St. Augustine situated in a verdant green landscape with green pastures surrounded by hedges, some trees, and the typical perspective toward the background with distant hills or mountains and a delightful sky with clouds and also the sun. A large city arises in the top right corner. The artist has done his very best to create this scene with a most impressive sense of realism and a strong interest in details, whether it pertains to the tiled floor or the elegant vestments. The margins with their countless natural objects reveal both a strong awareness of the usual typology of late medieval miniature art and also a great fascination with nature by itself in very concrete terms. The artist must have closely observed horses since the rider in the right margin is shown sitting on a horse that is apparently trotting forward in a most realistic fashion.

65 Robert M. Quinn, *The Retablo of the Cathedral of Ciudad Rodrigo, from the Samuel H. Kress Collections at the University of Arizona* (Tucson, University of Arizona, 1960); cf. the contributions to *Fernando Gallego and His Workshop: The Altarpiece from Ciudad Rodrigo. Paintings from the Collection of the University of Arizona Museum of Art*, ed. Amanda W. Dotseth, Barbara C. Anderson, and Mark A. Roglán (New York: Palgrave Macmillan, 2008); the plates are all digitized and available online at: https://uarizona.pastperfectonline.com/Search?search_criteria=Retablo&onlyimages=false (last accessed on Feb. 23, 2024); for a useful overview of the collection, see https://en.wikipedia.org/wiki/University_of_Arizona_Museum_of_Art (last accessed on Nov. 4, 2023).

66 The manuscript is held today in Brussels, Royal Library of Belgium, as ms. 9015, fol. 1. For a published copy, see Maurits Smeyers, *Flemish Miniatures from the 8th to the Mid-16th Century: The Medieval World on Parchment* (Turnhout: Brepols, 1999), 261.

Intriguingly, both here and in many other paintings, it is mostly domesticated nature, such as in the famous garden scene depicting Emilia, the female protagonist in Boccaccio's *Theseida* (ca. 1340–1341), seated in a delightful garden protected from the outside by a tall crenellated wall, painted by Barthélemy van Eyck (ca. 1420–after 1470), from ca. 1460–1465.⁶⁷ The courtly setting is unmistakable, and there is no wilderness to be seen, especially because the garden abuts a palace from where the two male protagonists (in their prison cell) gaze out onto the lady. An illustrated page in Jean Mansel's *La Fleur des histoires*, vol. IV from 1455–1460, depicting Emperor Constantine establishing the seat of his future government in Constantinople, add the intriguing feature of a river flowing between the palace and the city and a road running toward the distance up to a mountain in serpentine.⁶⁸ Certainly, the urban setting dominates, but it is divided into two parts, behind which we observe many different aspects of nature, both domesticated and wild.

One of the most beautiful examples of such Books of Hours might well be the *Flemish Calendar* created by Simon Bening around 1515, who was particularly intrigued by natural environments during the four seasons.⁶⁹ In the present quarto volume, which begins with a frontispiece showing the creation of Eve out of Adam's rib, and this in a beautifully designed park-like landscape with an elegant fountain in the background (paradise), we come across the most impressive and realistic depictions of nature. For each month of the year, the artist included a typical scene from the rural world, each filled with a breath-taking emphasis on even minute details (flowers, animals, tools, people, clothing, and particularly

⁶⁷ Vienna, Österreichische Nationalbibliothek, Cod. 2617, fol. 55; printed in Smeyers, *Flemish Miniatures* (see note 66), 268.

⁶⁸ Brussels, Royal Library of Belgium, ms. 9233, fol. 7; printed in Smeyers, *Flemish Miniatures* (see note 66), 314.

⁶⁹ Simon Bening, *Flämischer Kalender / Flemish Calendar / Calendrier Flamand* (Lucerne: Faksimile-Verlag, 1988). This is a facsimile of the manuscript cdm 23638 in the Bayerische Staatsbibliothek Munich. *Kommentar* by Thomas Kren and Johannes Rathofer (Lucerne: Faksimile-Verlag, 1988). See also Smeyers, *Flemish Miniatures* (see note 66), 429–32; for a nice selection of digital copies of his miniatures, esp. of his self-portrait with glasses in his hand, see https://commons.wikimedia.org/wiki/Category:Simon_Bening?uselang=de#/media/File:Simon_Bening_-_Miniaturenmalerei.jpg; and of his book of hours in the Metropolitan Museum, 2015.706, see https://commons.wikimedia.org/wiki/Category:Book_of_hours_by_Simon_Bening_-_Metropolitan_Museum_2015.706?uselang=de (last accessed on Jan. 12, 2024). There is a vast body of relevant research on Books of Hours, often presented in commentaries to facsimile editions. See, for instance, Ernst Trenkler, *Kommentar. Rothschild-Gebetbuch. Vollständige Faksimile-Ausgabe im Originalformat des Codex Vindobonensis Series Nova 2844 der Österreichischen Nationalbibliothek* (Graz: Akademische Druck- u. Verlagsanstalt, 1979); Franz Unterkircher, *Kommentar. Das Stundenbuch der Maria von Burgund. Codex Vindobonensis 1857 der Österreichischen Nationalbibliothek* (Graz: Akademische Druck- u. Verlagsanstalt, 1993).

people's activities in fields, gardens, and the open landscape). Sometimes, the focus rests on the rural population, sometimes on noble society, but every time, the naturalist background and frame fully dominate. Only sometimes does the theme switch to an interior space, or to an urban scene showing a massive crane lifting heavy barrels. Ominously, however, the last plate (XXVI) shows a scene from the biblical deluge, which bookends this work quite well, taking us from creation to apocalypse. Nevertheless, the delight in nature is still intensively noticeable. As Thomas Kren sensitively comments,

The turbulent activities of the foreground frame the artist's nearly global perspective of the far distance. Whereas the garments of the figures are rendered in bright, flat colors, the landscape is rendered in the finest nuances of light and shade that describe the texture of the water, its translucency, and turbulence; the downpour itself; and the light glimmering against that deep-set horizon at the right. Within the small dimensions of the illuminated page, Bening has fashioned a vast perspective and invented a vivid, frightening image of world destruction (304).

It is also important to consider that medieval artists greatly enjoyed playing with nature, or its fictional representation, depicting all kinds of monstrous creatures, hybrid beings, giants, dwarfs, misshapen beings, and other grotesque creatures.⁷⁰ These populate both illustrated manuscript pages and church buildings (gargoyles, corbels), and many poets engage with them as well (*Beowulf*, *Herzog Ernst*), not to mention the countless travelogues by individuals such as Marco Polo, John Mandeville, Arnold von Harff, Felix Fabri, and many others.⁷¹

⁷⁰ See now Olivia Swarthout, *Weird Medieval Guys: How to Live, Laugh, Love (and Die) in Dark Times* (London: Square Peg, 2023). Medieval monsters have long attracted scholarship; cf., for instance, Stephen T. Asma, *On Monsters: An Unnatural History of Our Worst Fears* (Oxford and New York: Oxford University Press, 2009); Marcus Hensel and Asa Simon Mittman, *Primary Sources on Monsters. Vol. 2: Demonstrare*. Arc Reference (Leeds: Arc Humanities Press, 2018); Richard H. Godden and Asa Simon Mittman, *Monstrosity, Disability, and the Posthuman in the Medieval and Early Modern World* (Cham, Switzerland: Palgrave Macmillan, 2019); David Williams, *Deformed Discourse: The Function of the Monster in Mediaeval Thought and Literature* (Montreal [Que.]: McGill-Queen's University Press, 1996). Rudolf Simek, *Monster im Mittelalter: die phantastische Welt der Wundervölker und Fabelwesen* (Cologne, Weimar, and Vienna: Böhlau, 2015). The literature on this topic is legion. Most recently, appeared a solid collection of articles on monsters from antiquity to the present time, *Monster, Chimären und andere Mischwesen in den Text- und Bildwelten der Vormoderne* (see note 18). Many of the contributions examine the relationships between monsters, people, nature, and divine forces, first in antiquity, then in the Middle Ages and the early modern period (including the monstrous in Shakespeare).

⁷¹ David Williams, *Deformed Discourse: The Function of the Monster in Mediaeval Thought and Literature* (Montreal: McGill-Queen's University Press, 1999); Albrecht Classen, "The Other" in Me-

We face here, however, a double danger either by overemphasizing or underemphasizing the specific correlation between the natural object or living creature and human society. Even in the case of highly realistic images in Books of Hours or in Renaissance paintings by Albrecht Dürer, for instance, we can identify either realism or idealism, patterns or direct reflections of reality. Much depends on the artist's intention, strategies, or motivations and hence also on our approaches to those artworks. We might, hence, discover impressive naturalistic details in a Carolingian miniature or in an Irish gospel book, whereas a late medieval illuminated manuscript with many natural elements might emerge as a highly allegorical or symbolic work of art with little interest in the natural objects populating a page or the margins.⁷² The same applies to sculptures that have appeared from the early Middle Ages and continued to be highly popular items in Gothic churches, for instances.

Realism and symbolism tend to join forces and speak various layers of languages within the religious context.⁷³ After all, pre-modern artists consistently worked on commission by a mighty or wealthy patron, and they did not enjoy the

dieval Narratives and Epics. The Encounter with Monsters, Devils, Giants, and other Creatures," *Canon and Canon Transgression in Medieval German Literature*, ed. A. Classen. Göppinger Arbeiten zur Germanistik, 573 (Göppingen: Kümmerle, 1993), 83–121; id., "The Epistemological Function of Monsters in the Middle Ages: From *The Voyage of Saint Brendan* to *Herzog Ernst*, Marie de France, Marco Polo and John Mandeville. What Would We Be Without Monsters in Past and Present!" *Lo Sguardo: Rivista di filologia* 9.2 (2012): 13–34 (https://www.academia.edu/6744378/The_Epistemological_Function_of_Monsters_in_the_Middle_Ages_From_The_Voyage_of_Saint_Brendan_to_Herzog_Ernst_Marie_de_France_Marco_Polo_and_John_Mandeville_What_Would_We_Be_Without_Monsters_in_Past_and_Present_); Asa Simon Mittman, *Maps and Monsters in Medieval England* (New York and London: Routledge, 2006); Charity Urbanski, *Medieval Monstrosity: Imagining the Monstrous in Medieval Europe* (London and New York: Routledge, 2024). The literature on this topic is legion, but it seems difficult to identify really new perspectives toward monsters in the most recent studies. For nature in travelogues and related texts, see my contribution to the present volume.

72 Michael Camille, *Image on the Edge: The Margins of Medieval Art* (London: Reaktion Books, 1995); Christopher Braider, *Refiguring the Real: Picture and Modernity in Word and Image, 1400–1700* (Princeton, NJ: Princeton University Press, 2015); Theresa Flanigan, "Likeness and Compassion in Franciscan Art: A Late Medieval Theory of Compassion and Naturalism in Frescoes in the Lower Church of San Francesco at Assisi," *Aesthetic Theology in the Franciscan Tradition*, ed. Xavier Seubert and Oleg Bychkov. Routledge Research in Art and Religion (New York and London: Routledge, 2020), 71–92.

73 *Emerging Naturalism: Contexts and Narratives in European Sculpture 1140–1220*, ed. Gerardo Boto Varela, Marta Serrano Coll, and John McNeill (Turnhout: Brepols, 2020). The abstract online at the publisher's website highlights the key message here: "As a result, late Romanesque sculpture extends across the period from 1140 to 1220, from Saxony to Galicia, though it is still impossible to encapsulate in a single statement what this complex network represented. However, the

freedom to express themselves individually, at least in the central pieces – the predella, corners of the central tableau, backsides of altarpieces, etc. were all spaces where the painter could possibly insert him/herself more in detail, and hence also more realistically.⁷⁴ A superb example of this concrete patron-artist relationship, which was also mirrored in the depiction of nature, can be found in the truly impressive and representative copy of the *Golden Bull* (originally created on behalf of Emperor Charles IV in 1356) prepared for King Wenceslas IV in 1400, just at the time when the Prince Electors had impeached him and tried to remove him from the throne. Despite their vote, he never officially stepped down keeping his royal title until his death in 1419, consistently having refused to accept his deposition. This illuminated manuscript served him significantly to resist the political moves against him and to hold up as evidence for his claim to his royal title nothing less but the *Golden Bull*.

This illuminated manuscript has now been thoroughly studied and discussed by a historian and art historian, who together edited the facsimile.⁷⁵ Many of the marginal drawings and images seem to have been produced by the court illuminator Frana in Prague, a leading figure in the Bohemian school from around 1400. Many of his manuscripts and those by his colleagues and disciples are marked by an impressive focus on detail, such as the multiple appearance of the kingfisher with its very pointed beak.⁷⁶

This bird was first eternalized by Ovid in his *Metamorphoses* (8 C.E.) in his account of King Ceyx and his wife Alcyone. When the king died by drowning, having disregarded her earlier warning, she threw herself into the water out of desperation, in a sign of absolute loyalty, which the gods then rewarded by granting both of them the opportunity to rise out of the sea again in the shape of kingfishers. As Maria Theisen confirms, the artist/s must have studied nature carefully since both the kingfisher and many other birds contained in the various Bohemian miniatures prove to be highly realistic.⁷⁷ But surprisingly particularly the

attainment of a compelling naturalism does seem to have been a shared aspiration among Latin European sculptors.”

74 *The Moral Authority of Nature*, ed. Lorraine Daston and Fernando Vidal (Chicago and London: University of Chicago Press, 2020).

75 Eva Schlotheuber and Maria Theisen, *Die Goldene Bulle von 1356: Das erste Grundgesetz des Römisch-Deutschen Reiches. Nach König Wenzels Prachthandschrift* (Wien, Österreichische Nationalbibliothek, Cod. 338). Darmstadt: wbg Edition, 2023; see my review in *Mediaevistik* 36 (forthcoming).

76 <https://en.wikipedia.org/wiki/Kingfisher> (last accessed on Dec. 10, 2023).

77 Maria Theisen, “Ein Prachtexemplar der Goldenen Bulle für Wenzel IV.,” *Die Goldene Bulle von 1356* (see note 75), 332–50, emphasizes: “Diese Singvögel scheinen tatsächlich nach der Natur gemalt zu sein . . . Darüber hinaus heben sie sich in ihrer feinen, naturgetreuen Darstellung von

kingfisher does not appear in the *Golden Bull*. Instead, numerous other birds take its place, but those are equally detailed and realistic. While the usual acanthus leaves surrounding the two columns of text, exorbitant by themselves, do not come as a real surprise, the inclusion of the various types of birds strikes us as most remarkable. The kingfisher traditionally symbolized marital loyalty, but also reformation, rejuvenation, and fertility, none of which were present in King Wenceslas life.⁷⁸

The Bohemian artists were certainly influenced by the Milanese book illuminator Giovannino de Grassi (d. 1398) who worked for Duke Gian Galeazzo Visconti since 1389 and who set the tone with his images of finely modeled animal images.⁷⁹ On the first page of the *Golden Bull*, the various birds, acanthus leaves, small medallions showing thinly clad bath maidens, and small grotesque animal figures (monkeys?) intermingle. Both columns with text contain a beautifully painted initial, the one on the left with a knotted piece of cloth, an emblem of Wenceslas, and the one on the right showing Christ as *Salvator mundi*. Altogether, which is not unusual for late medieval illuminated manuscripts, nature, God, and human society closely interact with each other and are all part of one and the same universe.

To be sure, nature has always constituted a hermeneutic challenge, but since postmodern critics have tended to qualify more realistic depictions over allegorical ones as 'progressive,' many misunderstandings have entered into the research on nature in the visual arts of the pre-modern age. We might even go so far as to identify the more 'modern' perspectives as reflections of increasingly 'colonialist' approaches, whereas earlier art works seem to have paid much more respect to the authentic quality of nature as a *Dasein* in Heidegger's terms. However, we

allem ab, was bisher in Prag an Buchmalerei üblich war" (345; This songbirds, indeed, appear to be painted based on natural observation . . . Moreover, they stand out by far compared to everything that had been usual practice in Prague book illuminations pertaining to their fine, realistic presentation).

78 That is Theisen's explanation for this odd phenomenon (345). We might have to examine this further, especially in comparison with other illuminated manuscripts where the kingfisher appears regularly, such as on the first page for Genesis in Wenceslas's Bible (Vienna, Österreichische Nationalbibliothek, Cod. 2759, fol. 2v).

79 Theisen, "Ein Prachtexemplar der Goldenen Bulle für Wenzel IV.," *Die Goldene Bulle von 1356* (see note 75), 345; for Grassi, see *Das Musterbuch des Giovannino de Grassi: Biblioteca Civica "Angelo Mai", Bergamo, Cassaf.1.21* (Lucerne: Faksimile-Verlag, 1998); *Animalia: il taccuino di disegni di Giovannino de Grassi e bottega della Biblioteca civica Angelo Mai di Bergamo*, introduzione e schede di Marco Rossi (Milan: Libri Scheiwiller, 1991). See also Kathrin Müller, *Musterhaft naturgetreu: Tiere in Seiden, Zeichnungen und Tapisserien des 14. und 15. Jahrhunderts*. Neue Frankfurter Forschungen zur Kunst, 21 (Berlin: Gebr. Mann Verlag, 2020).

also have to be attentive to the allegorical functions of those marvelous images of animals and plants, which is, of course, not untypical of most art throughout history, unless it wants to be nothing but photographic.

To do justice to the vast corpus of late medieval illuminated manuscripts, we would really have to examine each individual piece carefully because behind or next to the usual model images we can probably often discover unusual elements that shed more light on the various artists' perspective on nature. Realism as such was not to be expected because it did not attract the same interest as in modern times because the natural world was simply perceived through different lenses and with different interests in mind. However, we still would commit injustice if we categorized all medieval artists as divorced from nature and hence from careful observation of various scenes, animals, plant matter, hills and mountains, and other aspects. One late example showing a scene from Boccaccio's *Decameron* (Day Two, Fourth Story), allows us to probe this phenomenon just a little further. Miserable Landolfo, having been shipwrecked and clinging onto a wooden chest as his last resort, is rescued by a washing woman who drags him to the shore. There he discovers that the chest contains a large amount of jewels, which richly reconstitute his previously lost wealth.

The scene was painted by the so-called Mansel Master in ca. 1445, and the manuscript is today housed in Paris, Bibliothèque del' Arsenal (ms. 5070, fol. 51v).⁸⁰ In the foreground, we see a man carrying a heavy bag into a ship, while the owner steps out of a house listening to someone talking to him in the background, whom we cannot see. Another washing woman is at work in the foreground, while the center of the image is dominated by a rocky mountain on the top of which we recognize a castle. The eye of the spectator is allowed to wander into the background of the sea, where numerous sailing vessels are anchored. Most interesting for our purposes, however, proves to be the sky above the sea covered with banks of clouds. Since those are portrayed in light orange, we can surmise that it is sunset. Below them we can barely make out a distant shoreline going up to a mountain. Rarely has a late medieval artist paid so much attention to the evening sky and reflected on the shapes of the clouds and their discoloration. Dark blue color behind the clouds indicates the late hour of the day. Undoubtedly, the artist must have studied this natural phenomenon carefully and with great interest since it is presented most realistically. While the narrow mountain in the middle rises up sharply like a tower, probably copied from a model book, both the surface of the sea with its endless waves and the carefully

⁸⁰ Smyers, *Flemish Miniatures* (see note 66), 244; see also 310–11.

outlined evening sky with the cloud cover convey a soft mood and are very likely reflections of personal observations.⁸¹

***The Physiologus* – Again: An Epistemological Riddle**

In the introduction to my own piece in this volume, I engage extensively with the *Physiologus*, so for the purpose of these global ruminations it will suffice now to reflect only briefly on its relevance in epistemological and hermeneutic terms.⁸² *Physiologus*, composed sometime in the second or third century C.E. and subsequently enjoying infinite popularity throughout the following centuries, addresses a wide range of imaginary and real animals, but also natural objects, offering for each one of them an allegorical reading.⁸³ Although the anonymous author offers specific comments on the animals covered here in their living habits and food consumption (e.g., the roe, XXII, p. 33–34), the real purpose of the description focuses

⁸¹ For an interesting contrast, see a picture showing the apocalypse by an unknown French master, ca. 1450, Lyon, Bibliothèque municipale, ms. 439, fol. 8r; see Smeyers, *Flemish Miniatures* (see note 66), 350. Here, the sky is filled with symbolic objects, reflecting the uproar of nature and hence the coming of the apocalypse. In most late medieval paintings, the sky is kept in plain blue without any clouds, serving simply as a backdrop to the religious scene in the foreground. See, for instance, the book of hours of Charles the Bold, Ghent, Lieven van Lathem, 469, today Los Angeles, J. Paul Getty Museum, 89. ML. 35 (Ms. 37), where Christ pushes a small rocky island, upon which St. James the Greater is sitting, off the coast and thus setting him upon his path toward Galicia where he will establish the famous cathedral of Santiago de Compostela. The sky is cast in fairly dark blue, and some of the mountains in the background show the same color. That blue, only much lighter, is also used for the sea. Smeyers, *Flemish Miniatures* (see note 66), 394.

⁸² See now Anna Dorofeeva, *Reading Nature in the Early Middle Ages: Writing, Language, and Creation in the Latin Physiologus, ca. 700–1000*. Premodern Ecosystems – Climate, Environment, People (Leeds: Arc Humanities Press, 2023). Since this study appeared only in Nov. 2023, I could not yet consult it, but the online abstract by the publisher confirms: “This study demonstrates precisely how the early medieval re-contextualization of existing knowledge, together with a substantial amount of new writing, set the course of ideas about faith and nature for centuries to come. In doing so, it establishes the importance of multi-text miscellanies for early medieval written culture.”

⁸³ *Physiologus*, trans. Michael J. Curley (Chicago and London: University of Chicago Press, 1979); Gohar Muradyan, *Physiologus: The Greek and Armenian Versions with a Study of Translation Technique*. Hebrew University Armenian Studies (Paris, Leuven, and Walpole, MA: Peeters, 2005); *Christus in natura: Quellen, Hermeneutik und Rezeption des ‘Physiologus’*, ed. Zbyněk Kindschi Garský and Rainer Hirsch-Luipold. Studies of the Bible and Its Reception, 11 (Berlin and Boston: Walter de Gruyter, 2019); Sophie Fendel, *Physiologus- und Bestiarienrezeption in Nordeuropa: Wege eines Kulturtransfers*. Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde (Berlin and Boston: Walter de Gruyter, 2024).

on their symbolic function or metaphorical use for ethical, moral, religious, and philosophical concepts. In short, the *Physiologus* needs to be understood not as an early attempt at natural history but as a narrative predicated on the natural environment for allegorical and theological interpretations. For instance, we hear that the roe “represents the wisdom of God who loves the prophets” (33). As to the pearl – the author does not specifically distinguish between inanimate and animate objects (living creatures) – he comments: “John himself shows us that the intelligible pearl is Jesus Christ our Lord” (34). The wild ass represents the devil (39), the heron the well-established Church firmly settled (40), the weasel symbolizes those who do not pay attention to God’s words (50), and the unicorn could be identified with Christ Himself (51).

The writer did not pay particular attention to the individual animals but utilized them to elaborate a symbolic or metaphorical analysis of abstract ideas that required concrete narrative forms to be clearly expressed. In other words, it would be absurd to question whether the *Physiologus* mirrors nature or not, or to probe what concept of nature he might have had.

Sir Gawain and the Green Knight

The same phenomenon can be observed in much later works where nature plays a significant role and yet also disappears behind its allegorical and symbolic meaning. In the anonymous *Sir Gawain and the Green Knight* (perhaps 1371),⁸⁴ the protagonist has to cross a terrifying winter landscape, in which he can barely survive because of the cold and threatening beasts. All those elements indicate his fear that makes his heart almost freeze. But once he has reached Castle Hautdesert, located at a considerable distance from all other human habitation, so it seems (Wales?), he regains his courage and prowess.

Curiously, however, the host invites him into a wager predicated on the hunt. Each person is supposed to hunt whatever he can catch and to exchange their respective prey with the other one in the evening. For three days, Bercilak hunts first a deer (symbolizing speed), then a boar (representing strength), and finally a fox (standing in for intelligence and wit). By contrast, Gawain is hunted by Bercilak’s wife who tries to seduce him but gains only kisses from him, which are easy to exchange with the host during their evening meetings – certainly with no ho-

⁸⁴ See my discussion of this text above; here I only pick up some loose ends and connect those with the contemporary art works

mosexual implications, although it seems inconceivable to think about the logical consequences if he had slept with her. The natural environment outside of the castle and especially near the Green Chapel serves for the exploration of ethical, moral, and spiritual ideals and becomes a tool for the narrator to explore the social and ethical principles at stake here. Once the decapitation scene is behind him, meaning that he has regained his life, Gawain returns home, has to fend off natural dangers again, but they are no longer life-threatening:

Wild ways in the world Gawain now rides
On Gringolet, after getting the grace to go on with his life;
Often he had shelter in houses, and often stayed outside,
And he had many adventures in valleys, vanquishing his foes,
But I do not intend to tell all the tales at this time. (1479–83)

In very similar terms, most other medieval poets engaged more or less with nature, utilizing it as a necessary backdrop for the events taking place driving the respective romance or verse narrative. But this did not make those texts into representatives of natural observation by scientifically motivated poets. However, we should then not throw the proverbial baby out with the bathwater and criticize these pre-modern authors for their alleged failure to have paid sufficient or even necessary attention to nature. They were not, after all, naturalists, scientists, or environmentalists. Just as in the case of modern literature, everything depends on the individual text or poet and the latter's interest and concerns.⁸⁵ Considering the extent to which certain animals matter in some late medieval texts, such as in Chaucer's *Canterbury Tales* (ca. 1400), we quickly realize the great need to approach the natural world as depicted here very carefully and much sensitivity regarding the multiple layers of meaning and relevance.⁸⁶

Hartmann von Aue and Gottfried von Strassburg

Any number of earlier and later poets fundamentally agreed with the stance taken here. One of the most illustrative examples might be Hartmann von Aue's *Iwein* (ca. 1190) where in the initial scene the knight Kâlogrenant reports to his friends during a lull at court what had happened to him ten years earlier, a scene

⁸⁵ Jens Pfeiffer, "'Landschaft' im Mittelalter? Warum die Landschaft angeblich der Moderne gehört," *'Landschaft' im Mittelalter?* (see note 17), 11–30.

⁸⁶ *Rethinking Chaucerian Beasts*, ed. Carolyn Van Dyke. The New Middle Ages (New York: Palgrave Macmillan, 2015).

which scholars have discussed already many times.⁸⁷ He had left King Arthur's court on his quest for adventure, a standard narrative trope in courtly literature. He had turned toward the forest, Breziljân, where he quickly got lost after he had chosen one of many possible paths. Thick overgrowth made his passage almost impossible, but he pursued a "stic" (266) where many brambles and bushes grew that made his progress very difficult. As he emphasizes, "daz ich sô grôze arbeit / nie von ungeverte erleit" (271–72; that I suffered from more struggle on this little trodden path than ever before). However, in the evening, he found a new path that took him out of the wilderness to a clearing (275–76) – certainly a powerful metaphor for an epistemological phenomenon.

Just as in the case of *Sir Gawain and the Green Knight*, subsequently he came upon a castle where the owner welcomed him in a friendly manner. The subsequent events that also take place in the forest and challenge him greatly do not need to be discussed in detail. Suffice it to note that Kâlogrenant later comes across a wild man who has complete control over the ferocious animals of the forest, while he knows nothing about knighthood and chivalry. That strange creature then sends him off to a new path leading to a mysterious fountain where the real adventure awaits him, although there he then fails and has to return home as a defeated knight. However, this sad outcome then inspires Iwein to try his own luck, which constitutes the actual plot of Hartmann's romance.

For our purposes, we only need to focus on the brief descriptions about C[K]âlogrenant's efforts to make his way through the tough forest and on paths that have not been used for a long time, as demonstrated by the underbrush and thorns hindering his passage. The narrator emphasizes repeatedly what he had to face to pursue his goal, a knightly adventure. He had to decide on the right path ("wege manecvalt," 264; multiple paths), he chose a particular one ("stic," 266), which proved to be "ungeverte" (272; untrodden), until he finally hit upon a smoother "stic" (274) that allowed him to move forward and to find housing for the night. Human society and nature are in intensive communication here, and the knight finds himself greatly challenged in moving forward through the thicket of the forest where people have not trafficked for a long time.⁸⁸

⁸⁷ Hartmann von Aue, *Iwein*, ed. G. F. Benecke, K. Lachmann, and L. Wolff. Trans. and epilogue by Thomas Cramer. 4th rev. ed. (Berlin and New York: Walter de Gruyter, 2001); for convenience's sake, see the English translation, *The Complete Works of Hartmann von Aue*, trans. with commentary by Frank Tobin, Kim Vivian, and Richard H. Lawson. Arthurian Romances, Tales, and Lyric Poetry (University Park, PA: The Pennsylvania State University Press, 2001).

⁸⁸ For a critical approach that questions the actual role of nature as an epistemological entity in this context, see Uta Störmer-Caysa, *Grundstrukturen mittelalterlicher Erzählungen: Raum und Zeit im höfischen Roman*. de Gruyter Studienbuch (Berlin and New York: Walter de Gruyter,

Very similar to Hartmann, his follower, Gottfried von Straßburg, depicts a very similar scene in his famous romance *Tristan und Isolde* (ca. 1210) where the young protagonist is abducted by Norwegian merchants who hope to sell him for a good price into slavery. God, however, does not approve of this action and causes a huge storm that lasts for days and constantly threatens the entire crew and voyagers with shipwreck and drowning.

Finally, the merchants realize that they are being punished for their evil deed against Tristan and decide to drop the young man off at some coast, which immediately leads to an abating of the strong winds and terrifying waves. Poor Tristan, however, once having been taken to the beach, must fend for himself and figure out his way through a wilderness that terrifies him. After having prayed to God for His help in this sorrowful situation, the young man plucks all of his courage and makes his way up the mountains, searching for a path:

There were no roads or paths except for what he could make himself, and he had to use his hands and feet to clear the way and climb higher. He climbed up the mountain over undergrowth and rocks until he reached the top. There he chance he found an overgrown and narrow forest path, which he followed down the other side into the valley below in hopes of finding a proper road. In a short time, he reached a main thoroughfare that was wide and heavily traveled.⁸⁹

Like virtually all other courtly protagonists, Tristan operates successfully at the various courts, but he also knows well how to cope in nature. He utilizes this particular skill to his full advantage, especially when we consider the famous scene in the love cave where nature serves as the ultimate refuge for the lovers to hide

2007), 53–59. She probes, above all, the question whether the poets such as Chrétien de Troyes and Hartmann von Aue intended to identify the proper path through life for their protagonists, or whether they allowed random selections to dominate (54–55). Wandering through the world thus emerges as a hermeneutic challenge, and life becomes a labyrinth. The fundamental study of this topic was published by Erich Auerbach, “Der Auszug des höfischen Ritters,” id., *Mimesis: Dargestellte Wirklichkeit in der abendländischen Literatur*. 9th ed. (1946; Tübingen: Max Niemeyer, 1994), 120–38. However, Auerbach’s focus rests on the structural and narrative elements that morph into topoi and topics, whereas the role of nature is not of particular interest to him.

⁸⁹ Gottfried von Straßburg, *Tristan and Isolde with Ulrich von Türlin’s Continuation*. Ed. and Trans., with an Introduction, by William T. Whobrey (Indianapolis, IN, and Cambridge: Hackett Publishing Company, 2020), vv. 2563–80, p. 39. For a solid critical edition, see Gottfried von Straßburg, *Tristan*. Nach dem Text von Friedrich Ranke neu herausgegeben, ins Neuhochdeutsche übersetzt, mit einem Stellenkommentar und einem Nachwort von Rüdiger Krohn (Stuttgart: Philipp Reclam Jun., 1980). The best critical commentary is by Tomas Tomasek, *Gottfried von Straßburg* (Stuttgart: Philipp Reclam jun., 2007), but he does not consider ‘nature’ and the path through life in any particular manner.

away from society and to live just by themselves in a utopian setting.⁹⁰ It remains to be evaluated whether Tristan manipulates nature, whether he coopts it for his own purposes, whether he pays full or partial respect to nature, or whether he moves through nature as it proves to be most fitting for his purposes.⁹¹

Human existence, as explored by countless pre-modern poets and artists, philosophers, theologians, and scientists – but then also by those in the Romantic period and later who were influenced by their predecessors, such as William Blake – was determined by finding a passage through the dense labyrinth of nature, as Wolfram von Eschenbach illustrated it so powerfully both in his Grail romance, *Parzival* (ca. 1205), and in his enigmatic and fragmentary piece *Titirel* (ca. 1220). In that process of searching, it becomes challenging to understand whether nature determines life or whether life controls nature, or whether both aspects are completely intertwined with each other. Postmodernity seems to be on the brink of realizing this phenomenon once again, apparently drawing also inspirations from the medieval and early modern sources, but now much more aware of the profound existential dangers for human society because of countless forms of human abuse of nature.⁹²

90 Tomas Tomasek, *Die Utopie im 'Tristan' Gotfrids von Straßburg*. Hermaea. Germanistische Forschungen, Neue Folge, 49 (Tübingen: Max Niemeyer, 1985). For caves and grottos in early modern art where paintings teach important lessons about the relationship between humans and nature, see the contribution to this volume by Nurit Golan. For a new study on utopias in the pre-modern world, see Albrecht Classen, "Utopias in Medieval and Early Modern German and European Literature," *Interdisciplinary Studies on German Philology – Utopia and Dystopia in German Literature, Film, and Television*, ed. İrem Atasoy and Habib Tekin (Istanbul: Istanbul University Press, forthcoming).

91 Albrecht Classen, *Tracing the Trails in the Medieval World: Epistemological Explorations, Orientation, and Mapping in Medieval Literature*. Routledge Studies in Medieval Literature and Culture (New York and London: Routledge, 2021), chapters 4 (on Hartmann), 5 (on Gottfried), and 6 (on Wolfram), 119–90.

92 *Art, Technology and Nature: Renaissance to Postmodernity*, ed. Camilla Skovbjerg Paldam and Jacob Wamberg. Science and the Arts since 1750 (Farnham, Surrey: Ashgate, 2015); Razmig Keucheyan, *La nature est un champ de bataille: essai d'écologie politique*. La Découverte. Poche; Sciences humaines et sociales, 489 (2014; Paris: La Découverte, 2018), who argues that most of human waste is dumped where minorities and marginalized people live, globally. See also the earlier study by David Demeritt, (2002). "What is the 'Social Construction of Nature'? A Typology and Sympathetic Critique," *Progress in Human Geography* 26.6 (2002): 767–90; online at: <https://journals.sagepub.com/doi/10.1191/0309132502ph4020a> (last accessed on Jan. 9, 2024).

Automata Imitating Nature

As scholars have already observed for some time, there were numerous attempts by engineers and artists throughout the late Middle Ages to create automata, i.e., natural-looking objects that were nothing but mechanical devices like pre-modern robots.⁹³ However, even in those cases, and this long before the early modern age when such mechanical devices became rather popular, the natural images still remained dominant, while the technical device was hidden behind the natural mask.⁹⁴ The artists or craftsmen attempted to imitate nature (the body of Christ, etc.) and to replace it with a construction created by their hands. Of course, in those cases, nature as such does not seem to be at work there since those were figures like human beings. Nevertheless, the strategy to imagine robots itself underscores the attempt already at that time to compete with nature and to have mechanical structures outdo or at least copy the natural appearance of those sculptures.⁹⁵

While the author of the anonymous *Physiologus* (second century) theoretically drew from nature to develop his hermeneutic concept for spiritual interpretations, late medieval artists went several steps further to operate with natural

93 See the contributions to *Animation: Between Magic, Miracles and Mechanics. Principles of Life in Medieval Imagery*, ed. Hans Henrik Lohfert Jørgensen, Laura Katrine Skinnebach, and Henning Laugerud (Aarhus: Aarhus University Press, 2023); see my review in *Mediaevistik* 36 (forthcoming). E. R. Truitt, *Medieval Robots: Mechanism, Magic, Nature, and Art*. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2015). Strangely, neither here nor there do we find any reference to the robots as projected by the Middle High German poet The Stricker in his *Daniel von dem Blühenden Tal* (ca. 1225). 3rd rev. ed. by Michael Resler. Altdeutsche Textbibliothek, 92 (Berlin and Boston: Walter de Gruyter, 2009). Cf. Karl-Ernst Geith, Elke Ukena-Best, and Hans-Joachim Ziegeler, “Der Stricker,” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*, ed. Kurt Ruh et al. Vol. 9. 2nd completely rev. ed. (Berlin and New York: Walter de Gruyter, 1995), coll. 417–49. For a recent introduction to this poet, see Albrecht Classen, “The Stricker,” *The Literary Encyclopedia*, first published 16 August 2021, online at: <https://www.litencyc.com/php/speople.php?rec=true&UID=14777> (last accessed on Nov. 13, 2023). As to monsters in The Stricker’s *Daniel von dem Blühenden Tal*, see also Dorothea Klein, “Erzieher, Ordnungsstörer, poetologische Chiffre: Zur funktionalen Vielseitigkeit monströser Figuren im mittelalterlichen Roman,” *Monster, Chimären und andere Mischwesen* (see note 18), 219–41; here 238–39, who tries to explore classical model for the giant monster in this romance.

94 See, for instance, Reinhold Münster’s contribution to this volume. Cf. also the articles in *Les utopies scientifiques au Moyen Âge et à la Renaissance*, ed. Roberto Poma and Nicolas Weill-Parot (Florence: SISMEL – Edizioni del Galluzzo, 2021). For a broader transhistorical overview, see Clifford A. Pickover, *Artificial Intelligence: An Illustrated History: From Medieval Robots to Neural Networks*. Union Square&Co. Illustrated Histories (New York: Sterling, 2019).

95 For more examples in early modern literature (cosmology), often involving travels to the moon and various planets, see the contribution to this volume by Reinhold Münster.

objects or beings to depict a densely populated world both in the human garden or in the forest where God's miracles could manifest themselves. Formally, of course, there is a huge difference between those works, but in the essential approach to nature as a medium to convey a subtle, spiritual message, we perceive remarkable similarities.

In human thinking, what would an animal matter, apart from the fact that it constitutes food, a threat to one's life, or serves as a protector (the case of dogs, for example)? It amounts almost to a truism by now that in the pre-modern world, nothing in the natural world was without signification, and as signs, or symbols, animals assumed a central role in literature, the arts, religion, philosophy, medicine, and sciences. The same applies more or less to plants, rocks, water, air, etc. But as objects or symbols, every entity or being is subject to historical change; that is to say, the human perspective has changed throughout time, which we experience until today.⁹⁶

In an odd twist of thinking, a number of times during the Middle Ages, animals were viewed as "responsible" for their actions and had thus to be treated as culpable when they had caused damage to human property or life, leading to actual legal proceedings against them, with corresponding punishments. However, medieval critics such as Philippe de Beaumanoir (ca. 1247/1250–1296) and Thomas Aquinas (1225–1274) already questioned the validity of such an approach.⁹⁷ While this phenomenon challenges our understanding of medieval mentality, it definitely underscores the fact that people in the pre-modern age entertained a variety of ap-

96 Delort, *Les animaux* (see note 41), 28; see also Nobert Benecke, *Der Mensch und seine Haustiere: Die Geschichte einer jahrtausendalten Beziehung* (Stuttgart: Theiss, 1994); Erhard Oesner, *Pferd und Mensch: Die Geschichte einer Beziehung* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2007); *Jagd und höfische Kultur im Mittelalter*, ed. Werner Rösener. Veröffentlichungen des Max-Planck-Instituts für Geschichte, 135 (Göttingen: Vandenhoeck & Ruprecht, 1997); Steven Wagschal, *Minding Animals in the Old and New Worlds: A Cognitive Historical Analysis* (Toronto: University of Toronto Press, 2019); Ian P. Wei, *Thinking about Animals in Thirteenth-Century Paris: Theologians on the Boundary Between Humans and Animals* (Cambridge and New York: Cambridge University Press, 2020). As the study by Bruce Thomas Boehrer, *Animal Characters: Nonhuman Beings in Early Modern Literature* (Philadelphia, PA: University of Pennsylvania Press, 2011), indicates, the topic touched upon here was not at all limited to the Middle Ages. Animal symbolism is both very ancient and also relevant until today, and this on a global level. This has also been discussed by the contributors to *The Beast Within: Animals in the Middle Ages*, ed. Joyce E. Salisbury. Third ed. (1994; London and New York: Routledge, 2022).

97 Peter Dinzelbacher, *Das fremde Mittelalter: Gottesurteil und Tierprozess* (Essen: Magnus, 2006; 2nd, extensively revised edition, Darmstadt: wbg Academic, 2020); see also Darren Oldridge, *Strange Histories: The Trial of the Pig, The Walking Dead, and Other Matters of Fact from the Medieval and Renaissance Worlds* (London and New York: Routledge, 2005).

proaches to the animal kingdom and embraced both material and spiritual perspectives, and this certainly as a reflection of the ongoing discourse on nature.

Actually, if we come to think of it, the post-modern world seems strongly bent on discussing nature primarily from a scientific or a romantic-illusionary angle, i.e., virtually in a positivist manner, whereas the pre-modern world acknowledged all of nature as metaphors, symbols, or meaningful signposts, as is so often demonstrated in manuscript illustrations (see above).⁹⁸

Scholars have generally commented on medieval notions of nature as having been non-empirical, interested mostly in theological interpretations instead of the material object/animal itself. Major learned writers such as Isidore of Seville (ca. 560–636), Hrabanus Maurus (ca. 780–856), Thomas de Cantimpré (1201–1272), Vincent of Beauvais (ca. 1184/1194–ca. 1264), and Bartholomaeus Anglicus (ca. 1202–1273) attempted to gain an understanding of God's creation and hence of God Himself through their symbolic reading, which was certainly a valid concept for their own purposes. Would we hence have to ridicule them for their lack of interest in empiricism?⁹⁹

After all, anyone working as an expert with horses, dogs, sheep, fish, bees, cats, goats, mice, rats, insects of all kinds, or flowers, trees, bushes, etc. for professional reasons was pretty competent in handling them, just as we do today, though we would have to grant that modern sciences have vastly widened and deepened our understanding.¹⁰⁰ Correspondingly, the practitioners could certainly demonstrate a mastery of the matter as far as they were concerned. But when we look at medieval depictions of animals, or read relevant treatises, then we simply recognize two or even more separate tracks of a broad discourse on

98 Franz Unterkircher, *Das Stundenbuch des Mittelalters* (Graz: Akademische Druck- und Verlagsanstalt, 1985); 552. Claire Donovan, *The de Brailes Hours. Shaping the Book of Hours in Thirteenth-Century Oxford* (Toronto and Buffalo: British Library, 1991) Albrecht Classen, "The Book of Hours in the Middle Ages," *Futhark: Revista de Investigación y Cultura* 2 (2007): 111–29; Frida Escobedo and Maria Gómez de León Lopez, *The Book of Hours* (Zürich: Lars Müller Publishers, 2023). We have available today numerous medieval Books of Hours in the form of facsimiles.

99 Obermaier, ed., *Tiere und Fabelwesen* (see note 16), 13–16.

100 *The Medieval Shepherd: Jean de Brie's Le Bon Berger (1379)*, ed. and trans. Carleton W. Carroll and Lois Hawley Wilson (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 2012); Harriet J. Evans Tang, *Animal-Human Relationships in Medieval Iceland: From Farm-Settlement to Sagas. Nature and Environment in the Middle Ages* (2022; Cambridge: D. S. Brewer, 2023). See also the series, *A Cultural History of Animals*, ed. Linda Kalof and Brigitte Resl. Vol. 2: *A Cultural History of Animals in the Medieval Age*, ed. Brigitte Resl (Oxford and New York: Berg, 2007). As to friendship between people and animals, see the anthology, *Tiere als Freunde im Mittelalter: Eine Anthologie*. Eingeleitet, ausgewählt, übersetzt und kommentiert von Gabriela Kompatscher zusammen mit Albrecht Classen und Peter Dinzelbacher (Badenweiler: Wissenschaftlicher Verlag, 2010).

nature as far as it affected human society and required people to interact with it (to get food, resources, to defend themselves, etc.).

On the one hand, we can identify very dedicated and detailed descriptions of animals or birds, such as Emperor Frederick II's *De arte venandi cum avibus* (Book of Hunting with Falcons) from ca. 1241–1248, in which he emphasized what his impetus was: “manifestare ea, que sunt, sicut sunt” (to show the things that exist as they are).¹⁰¹ Until today, this proves to be the best manual for this sport with birds of prey concerning their upbringing, training, and treatment.

Thomas de Cantimpré (ca. 1200–1270), by contrast, although he claimed to have composed a detailed treatise on bees, his *Bonum universale de apibus* (ca. 1259), was not so much interested in those insects, as much as he was fascinated by their seemingly perfect community. Instead, each form of behavior by the bees is used as an exemplum to discuss the various positions of clerics and worldly dignitaries, such as the king as the one chosen from among all people as the most dignified individual. All bees are identified as endowed with full virginity, which then carries over to the members of the clergy. Thomas also presents numerous miracle accounts and even offers a theoretical explanation for anti-Semitism (book 29, ch. 13 and 23) and examines the relationship between Christians and members of other religions.¹⁰² In the formulation, “Christus rege apum” (ch. 37, book 1), the essence of Thomas's approach to nature comes forth most clearly. His admiration for bees carries over to the role of the Church and hence of God.¹⁰³

We also would have to consider his very famous *Liber de natura rerum* (ca. 1225–1244), dedicated to a comprehensive discussion of natural history, which enjoyed great popularity and which is fully dedicated to the wide range of animals. Moreover, there are numerous other ‘biological’ or natural aspects discussed there, beginning with all human body parts and processes in the body, turning to

101 Friderici Romanorum Imperatoris Secundi *De arte venandi cum avibus*, ed. Carl Arnold Willemsen. 2 vols. (Leipzig: Insel, 1942), 2, line 19–20; *The Art of Falconry Being the De arte venandi cum avibus of Frederick II of Hohenstaufen*, trans. and ed. by Casey A. Wood and Florence Marjori Fyfe. 3rd ed. (1943; Stanford, CA: Stanford University Press 1961). See also Dorothea Walz, *Das Falkenbuch Friedrichs II.* (Graz: Akademische Druck- und Verlagsanstalt, 1994), 8. It deserves mention that there were important precedents in the Arabic world; see, for instance, Muḥammad ibn ‘Abdallāh al-Bāzīyār, *Das Falken- und Hundebuch des Kalifen al-Mutawakkil: Ein arabischer Traktat aus dem 9. Jahrhundert*, ed., trans., and intro. by Anna Akasoy and Stefan Georges (Berlin: Akademie-Verlag, 2005).

102 Julia Burkhardt, *Von Bienen lernen: Das Bonum universale de apibus des Thomas von Cantimpré als Gemeinschaftsentwurf. Analyse, Edition, Übersetzung, Kommentar*. 2 vols. Klöster als Innovationslabore: Studien und Texte, 7 (Regensburg: Schnell & Steiner, 2022).

103 For a much more specific example of a technical book or manual on bee keeping, see the contribution to this volume by Nicole Archambeau.

the human soul according to Augustine's teachings, monstrous people, then to many animals, birds, sea monsters, fish, snakes, vermin, ants, spiders, frogs, etc., then to trees, plants, wells, stones and gems, the seven regions of the earth, the seven planets, meteorology, the four elements, and the movement of the celestial bodies. Here we really face a medieval encyclopedia on nature.¹⁰⁴

The treatise *De animalibus* by Albertus Magnus (ca. 1256–1260) or Konrad von Megenberg's *Buch der Natur* (1349–1350) opened new perspectives more specifically predicated on empirical observations.¹⁰⁵ Albertus Magnus deserves particular credit for his systematic approach in describing first the nature of human beings, then of the quadrupeds, the flying animals, aquatic animals, serpents, and finally of tiny anemic animals. He was probably the most outstanding scholar who reflected the fundamental paradigm shift in scholarship and the sciences – not a real difference at least in medieval terms – from the twelfth to the thirteenth century. In his epilogue, which is kept extremely short, he insists that he closely followed Aristotle's teachings and refrained from allowing his subjective perspective to enter the picture. He regards himself as “interpreter and commentator” (449) and tries to steer a neutral course through natural history.

Philosophical Perspectives

Past and Present Concerns

While the world of early medieval monasticism was mostly focused on a meditative appropriation of or approach to the natural environment, the emerging cathedral schools and then the universities strongly advocated the critical study of the real nature as the essential domain for people who drew from it and gained their sustenance thereby. In fact, as early as the twelfth century, the material world was accepted as a positive phenomenon that deserved to be studied closely and to be enjoyed as much as possible, being part of God's larger creation. The most vivid expression for this change in thinking was the renewed sense of curi-

¹⁰⁴ Thomas Cantimpratensis, *Liber de natura rerum: Editio princeps secundum condices manuscriptorum*. Part 1: *Text*, ed. H. Boese (Berlin and New York: Walter de Gruyter, 1973).

¹⁰⁵ Konrad von Megenberg, *Das Buch der Natur*. Vol. 2: *Kritischer Text nach den Handschriften*, ed. Robert Luff and Georg Steer (Tübingen: Max Niemeyer, 2003). For a useful summary of the content, see https://de.wikipedia.org/wiki/Das_Buch_der_Natur (last accessed on Nov. 23, 2023). For a critical study of the manuscripts and incunabula, see Ulrike Spyra, *Das “Buch der Natur” Konrads von Megenberg: Die illustrierten Handschriften und Inkunabeln* (Cologne, Weimar, and Vienna: Böhlau, 2005).

osity, which made its presence felt already then, and not only by the time when the Italian Renaissance emerged.¹⁰⁶

One indicator of this major shift in thinking was the renewed interest in the Platonic dialogue, *Timaeus* (written ca. 360 B.C.E.) in which the speakers (e.g., Hermocrates, Timeus, Socrates, Critias) examine the differences between the natural world that is changing all the time and the eternal world that is immovable and fixed. According to *Timaeus*, a demiurge must be identified as the creator of the physical dimension. This craftsman must have used the spiritual world as a model for the material world creating order, or a balance of the four elements, although the latter remains subject to the law of perennial change or transformation. The demiurge then gave the shape of a globe to the new creation because it represented the ideal of perfect harmony. To quote at least two crucial statements from the original: “This, then, is how it has come to be: it is a work of craft, modeled after that which is changeless and is grasped by a rational account, that is by wisdom.”¹⁰⁷ And: “our universe came to be as the one and only thing of its kind, is so now and will continue to be so in the future” (1237, ch. 31).

After translations of *Timeus* into Latin by Cicero (partial) around 45 B.C.E. and Calcidius in the fourth century (up to section 53c), medieval scholars at the Chartres School, such as Thierry of Chartres (d. ca. 1150) and William of Conches (ca. 1090–ca. 1155/1170), but also Arabic intellectuals in the tenth century such as Ibn al-Nadīm (d. ca. 995) and Sa’id Ibn al-Bitriq (877–940; also known as Eutychius of Alexandria), deeply engaged with Plato’s treatise and tried to apply the teach-

106 For the traditional understanding of the history of curiosity, see Philip Ball, *Curiosity: How Science Became Interested in Everything* (Chicago: University of Chicago Press, 2013); cf. also the contributions to *Curiosity and Wonder from the Renaissance to the Enlightenment*, ed. R. J. W. Evan and Alexander Marr (Aldershot, Hampshire, and Burlington, VT: Ashgate, 2007); Barbara M. Benedict, *Curiosity: A Cultural History of Early Modern Inquiry* (Chicago: University of Chicago Press, 2001). For medieval perspectives, see Christian K. Zacher, *Curiosity and Pilgrimage: The Literature of Discovery in Fourteenth-Century England* (Baltimore, MD: The Johns Hopkins University Press, 1976). As to the fundamental research on curiosity, see *Theoretische Neugierde. Horizonte Hans Blumenbergs: Mit einem unveröffentlichten Manuskript von Blumenberg*, ed. Christine Blättler, Ralf Köhne, and Angelika Messner. Allgemeine Zeitschrift für Philosophie. Beihefte (Stuttgart: frommann-holzboog Verlag, 2023); his original contribution, however, was Hans Blumenberg, *Der Prozeß der theoretischen Neugierde* (Frankfurt a. M.: Suhrkamp, 1973). This is part three of his *Die Legitimität der Neuzeit* (1973).

107 *Plato’s Cosmology: The “Timaeus” of Plato*, trans. with a running commentary by Francis Macdonald Cornford. 4th ed. (London: Routledge & Kegan Paul, 1956); or Plato, *Complete Works*, ed., with intro. and notes, by John M. Cooper (Indianapolis, IN, and Cambridge: Hackett Publishing Company, 1997), *Timaeus* trans. by Donald J. Zeyl, 1224–91; here 1235 (ch. 29).

ings to their own philosophy.¹⁰⁸ *Timeus* was the only work by Plato available to the medieval scholars, so his teachings about God and nature, i.e., the physical dimension, mattered critically throughout the ages, though they received different types of interpretation.

For us today, in the wake of the early modern scientific revolution, those seem to be most relevant vis-à-vis medieval attitudes toward nature, but they really should be treated simply as the other side of the same coin. Everything in our existence can and maybe has to be approached from a material and a spiritual perspective at the same time, although the sciences and the humanities are, unfortunately, still very far apart in modern universities. In the Middle Ages, above all, the latter dominated at least among the learned authors (mostly theologians); today, the former has gained superiority, as much as fundamentalist religious groups have gained in strength in many parts of our world. Our absolute belief in rationality and the power of technology has produced, among many other things, Artificial Intelligence (AI), which has the capacity to imitate human thinking and even to supersede it. But does AI understand nature? Can it create life? And how about human emotions, especially vis-à-vis nature, whether birds, meadows, flowers, the ocean, and so forth? In short, by turning to the large topic of nature, this volume intends to probe more deeply the relationship between human society and its natural environment, here through a cultural-historical lens.

The intention pursued here might be overly ambitious since nature encompasses virtually everything, but in the epistemological core, there seems to be hardly anything more important to study if we want to get a good grasp of pre-modern culture (or our own, for that matter). After all, whatever we do, think about, write, or create, it all comes down, in one way or the other, to the question of the relationship between humanity and nature since we depend so deeply on the natural resources, including food, air, shelter, and energy, and because we are, ultimately also part of nature.

108 For critical comments, see the contributions to *Platons Timaios als Grundtext der Kosmologie in Spätantike, Mittelalter und Renaissance / Plato's Timaeus and the Foundations of Cosmology in Late Antiquity, the Middle Ages and Renaissance*, ed. Thomas Leinkauf and Carlos Steel. *Ancient and Medieval Philosophy*, 1 (Leuven: Leuven University Press, 2005); *Plato's "Timaeus": Proceedings of the Tenth Symposium Platonicum Pragense*, ed. Chad Jorgenson, Filip Karfik, and Štěpán Špinka. *Brill's Plato Studies Series*, 5 (Leiden and Boston: Brill, 2021); cf. also Sarah Broadie, *Nature and Divinity in Plato's Timaeus* (Cambridge: Cambridge University Press, 2012); and Colette Dufossé, *Les théories de la vision dans les mondes grec et latin du IV^e au XII^e siècle: entre permanence et renouveau*. *Sciences, techniques et civilisations du Moyen Âge à l'aube des lumières*, 22 (Paris: Honoré Champion Éditeur, 2021); *Material World: The Intersection of Art, Science, and Nature in Ancient Literature and Its Renaissance Reception*, ed. Guy Michael Hedreen. *NIKI Studies in Netherlandish-Italian Art History*, 15 (Leiden and Boston: Brill, 2021).

The desperate struggle by many groups today to fight against the global climate crisis fundamentally amounts to a struggle to survive here on Earth. Whether those struggles are meaningful, effective, or reasonable, or whether global warming is controllable at all does not need to be answered here. However, those struggles clearly indicate a strong awareness today of the need for humans to become more aware of the natural world and our impact on it because if we destroy nature, we also destroy human life on this globe.¹⁰⁹

With this warning in mind, we turn back to the literary, historical, medical-historical, and art-historical documents from the pre-modern world and quickly realize, which is not to undermine the current warnings about the global threat to our whole existence, that the fear of the apocalypse has a long tradition, perhaps because humans have always displayed extremely greedy and ultimately self-destructive tendencies to take excessive advantage of the given natural resources.¹¹⁰ Of course, we might simply ask whether this phenomenon is the result of a depraved attitude, or whether it is the result of inherent conditions in humans who simply want to survive, accumulate wealth, and live a comfortable life. Whenever the external circumstances allow it, people have always taken advantage of the available resources.

The better our technologies become, the more we utilize nature to our advantage. Not by accident have temperatures risen globally since the middle of the

109 See especially the contribution to this volume by Fidel Fajardo-Acosta. The research on this topic is legion, of course. See, for instance, the contributions to *Perspectives on Ecocriticism: Local Beginnings, Global Echoes*, ed. Ingemar Haag, Karin Molander Danielsson, Marie Öhman, and Thorsten Pöplow (Newcastle upon Tyne: Cambridge Scholars Publishing, 2019); Wes Jackson and Robert Jensen, *An Inconvenient Apocalypse: Environmental Collapse, Climate Crisis, and the Fate of Humanity* (Notre Dame, IN: University of Notre Dame Press, 2022); Carl Cassegård, Carl and Håkan Thörn, *Post-Apocalyptic Environmentalism: The Green Movement in Times of Catastrophe* (Cham: Palgrave Macmillan, 2022); *Worlds Ending. Ending Worlds: Understanding Apocalyptic Transformation*, ed. Jenny Stümer, Michael Dunn, and David Eisler (Berlin and Boston: De Gruyter Oldenbourg, 2024).

110 *The Apocalypse in the Middle Ages*, ed. Richard K. Emmerson and Bernard McGinn (Ithaca, NY: Cornell University Press, 1992); *Last Things: Death and the Apocalypse in the Middle Ages*, ed. Caroline Walker Bynum and Paul Freedman. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2000); R. M. Christofides, *Shakespeare and the Apocalypse: Visions of Doom from Early Modern Tragedy to Popular Culture*. Continuum Shakespeare Studies (London: Continuum, 2012); *Apocalypse and Reform from Late Antiquity to the Middle Ages*, ed. Matthew Gabriele and James T. Palmer (London and New York: Routledge, Taylor & Francis Group, 2019); *The End-Times in Medieval German Literature: Sin, Evil, and the Apocalypse*, ed. Ernst Ralf Hintz and Scott E. Pincikowski. Studies in German Literature, Linguistics, and Culture (Rochester, NY: Camden House, 2019); Bart D. Ehrman, *Journeys to Heaven and Hell: Tours of the Afterlife in the Early Christian Tradition* (New Haven, CT: Yale University Press, 2022).

twentieth century when we witnessed a tremendous push forward in innovative machinery and technologies at large, in medicine and the sciences. The world population has grown tremendously ever since, whereas the natural resources have remained the same, which has created an enormous gap between supply and demand. The big question hence remains whether we have to fear the ultimate collapse, as predicted by the Club of Rome in 1972,¹¹¹ or whether humanity can handle the many and major challenges, as it has always had in the past, surviving at large under any circumstances. For instance, we have not run out of fossil fuels, on the contrary; the world is awash in natural gas and oil, and this in 2023. But temperatures are certainly rising, leading to many catastrophic developments across the world. Hence, there are many good reasons to be concerned, if not troubled, but we must also stay away from alarmist attitudes as if the end of all existence is near. Warnings about the apocalypse have a long history, and so the realization that those simply did not yet occur.

The present volume does not intend to prophesize the future, and it does not engage with the current scientific discourse on this global topic of great urgency. There are many doomsayers today, who gain much support from scientific data, but this does not necessarily hold true in every respect.¹¹² Instead, this book turns to the pre-modern discourse in the western world and attempts to identify the various topics, concerns, fears, attitudes, and perspectives regarding the interaction of nature and humanity at that early period. Importantly, understanding the history of the discourse itself will provide us with valuable insights into the common tropes utilized throughout time and hence might help us to calm down in face of global changes, dangerous (most probable) or not. I am driven by the belief that by bringing to light what pre-modern poets, artists, scientists, theologians, and medical experts had to say about this existential link between the physical environment and people we will gain a more solid footing to handle the global crisis in the twenty-first century. The current situation might well be al-

111 Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (New York: Universe Books, 1971; fifth edition already in 1975); online at: https://collections.dartmouth.edu/content/deliver/inline/meadows/pdf/meadows_ltg-001.pdf (last accessed on Dec. 30, 2023). The responses to this report have been manifold and deeply impactful; see now *Limits and Beyond: 50 Years on from The Limits to Growth, What Did We Learn and What's Next? A Report to The Club of Rome*, ed. Ugo Bardi, Carlos Alvarez Pereira (London: Exapt Press, 2022). For a helpful summary and further reflections, along with an extensive bibliography, https://en.wikipedia.org/wiki/The_Limits_to_Growth#cite_note-12 (last accessed on Dec. 30, 2023).

112 Cf., for example, the highly negative views by Niall Ferguson, *Doom: The Politics of Catastrophe* (London: Allen Lane, 2021). Many critics, however, have voiced opposite views and questioned some of his arguments.

ready catastrophic and far beyond what we have ever witnessed, and hence, perhaps, unavoidable or unchangeable because we are already beyond the critical tipping point – by all accounts, the year 2023 was the hottest on record in world history¹¹³ – but fear of profound climate change was voiced already long before.¹¹⁴ After all, earthquakes, volcanic eruptions, tsunamis, extreme weather conditions, avalanches, and other catastrophes have always been part of history.¹¹⁵ Of course, both the quantity and quality of those events have dramatically increased since the latter half of the twentieth century, but this does not simply mean that humanity is about to face its own apocalypse. Climatologists, hydrologists, marine biologists, geologists, and many others are certainly asked to contribute to the careful analysis of the impacts of global warming and maybe to suggest responses.¹¹⁶

But medieval historians, literary scholars, and others can also add significantly to this global discourse by revealing many different aspects of this critical relationship between nature and humanity. Whether the political decision makers will listen to all of us, of course, remains rather doubtful. But if natural scientists and humanities scholars together push the issue, drawing parallels, reflecting on the ominous signs as they were observed in the past and that are much more dramatically present today, we might have a chance, after all. If nothing else, this volume will at least turn our attention to numerous and very diverse approaches to nature as viewed by people in different periods, cultures, languages, and media.

113 <https://climate.copernicus.eu/copernicus-2023-hottest-year-record> (last accessed on Jan. 10, 2024).

114 See, for instance, Pascale Bermon, “A Global Warming Before the Last Judgment? The Conflagration (Diluvium Ignis) in Latin Philosophy and Theology (12th–14th Century),” *Histoire de la fin des temps: Les mutations du discours eschatologique. Moyen Âge, Renaissance, Temps modernes*, ed. Édouard Mehl and Christian Trottmann. Collection Philosophie de la religion (Strasbourg: Presses universitaires de Strasbourg, 2022), 103–20; Grazia Maria Fachechi, “Global Warming, patrimonio paremiologico e iconografia dei mesi nella scultura medievale in Italia,” Grazia Maria Fachechi and Manuel Castiñeiras, *Il tempo sulla pietra. La raffigurazione dei mesi nella scultura medievale (secoli XII–XIII)*. Chiaroscuro, 3 (Rome: Gangemi editore, 2019), 33–111; John Usher, “Global Warming in the Sonnet: The Phaeton Myth in Boccaccio and Petrarch,” *Studi sul Boccaccio* 28 (2000): 125–83.

115 See the contribution to this volume by Nurit Golan dealing with terrifying interior paintings (Mannerist) addressing the collapse of the world of giants smashed by the forces of nature that assumes a form of agency.

116 See, for instance, Andrey Ganopolski, Ricarda Winkelmann, and Hans Joachim Schellnhuber, “Critical Insolation-CO₂ Relation for Diagnosing Past and Future Glacial Inception,” *Nature* 534 (2016): S19–S20; online at: <https://doi.org/10.1038/nature18452> (last accessed on Dec. 30, 2023). There are many other relevant studies confirming the same conclusions based on many different sets of data.

Of course, it would amount to hubris if we claimed to open a completely new chapter in pre-modern research. It might be difficult to identify any medieval or early modern theologian and philosopher who would not have made an effort to define or at least to describe nature, beginning with St. Augustine and Boethius extending to Albertus Magnus, Konrad von Megenberg, Thomas Aquinas, John Duns Scotus, William of Ockham, John Buridan, Thierry of Chartres, and Nicholas of Cusa.¹¹⁷ Mystical authors such as Hildegard of Bingen and Meister Eckhart as well as many university professors worked hard to come to terms with nature as a global phenomenon, almost a litmus test for all theological and scientific discussions already in the pre-modern world. Alchemists were as much fascinated by the inner forces of nature as astronomers and astrologists, and horticulturists who worked for their princes and felt much challenged by nature which they tried to manipulate or comprehend; and so did countless artists and scholars. Here I have been able to touch upon this huge topic which would require a book-length study all by itself. Or maybe this essay is already a major attempt to write that book.

Of course, throughout the Middle Ages, nature was God's creation, and everything was to be seen through that lens. Only in the later centuries did the notion of "deus sive nature" by Baruch Spinoza (1632–1677) gain popularity, which changed radically the relationship between God and people because everything was encapsulated under the term 'nature,' meaning substance, which took the divine out of the universal formulas describing this and the spiritual world, but only in some respects. Spinoza did not deny God as the demiurge, or creator, but he identified nature as a holistic entity that evolved from God and hence was part of God. The immanent creation of nature implies the objective creation by God.¹¹⁸

As an aside, the act of God's creation by a crafty and meticulous demiurge was most powerfully depicted by the Romantic painter and poet William Blake (1757–1827) in the design "Ancient of Days" as a frontispiece to his work *Europe a Prophecy* (1794) (see Fig. 1), a significant indicator how much pre-modern and Romantic artists and writers interacted or globally communicated with each other and appreciated the divine character of all nature.¹¹⁹

117 A. Speer, "Natur," *Lexikon des Mittelalters*, Vol. VI: *Lukasbilder bis Plantagenêt* (Munich and Zürich: Artemis & Winkler Verlag, 1994), 1040–43. See also the excellent contributions to *Mensch und Natur im Mittelalter*, ed. Albert Zimmermann and Andreas Speer. 2 vols. *Miscellanea Mediaevalia*, 21/1–2 (Berlin and New York: Walter de Gruyter, 1991).

118 J. B. Metz, "Natur," *Lexikon für Theologie und Kirche*, ed. Josef Höfer and Karl Rahner. Vol 7: *Marcellinus bis Paleotti* (Freiburg: Verlag Herder, 1962), 805–08.

119 https://en.wikipedia.org/wiki/The_Ancient_of_Days (last accessed on Jan. 9, 2024); see also the contributions to *The Cambridge Companion to William Blake*, ed. Morris Eaves. Cambridge Com-

Medieval theologians viewed nature as God's creation, hence as a separate entity, as Aristotle had already taught, as an a priori law of the activity of all being. Turning to nature hence meant diving into a network of meanings created by God.¹²⁰ The intellectual's task was, subsequently, to discover what God had produced, with what purpose, and what it ultimately could tell people about the divine hidden in nature.

Since the twelfth century, many scholars, strongly influenced through the new reception of Aristotle, divided nature into the celestial and the earthly sphere, the former immovable and eternal, the latter constantly in flux and transformation. In Avicenna's and Averroes's terms, those were the *natura universalis* and the *natura particularis*, the latter being inherent in all bodies in the sublunar world that enjoy a certain degree of autonomy, although they are subject to constant variations.¹²¹ It would go too far here to enter into a detailed discussion of nature in the philosophical discourse; suffice it here to confirm that the question regarding the meaning and relevance of nature mattered deeply throughout the entire history covered in this volume (i.e., from the earliest Middle Ages [*Beowulf*] to Spinoza [seventeenth century]).

The focus of the present article has rested mostly on the more pragmatic aspects of nature as mirrored in literary works, art history, and some encyclopedias, and I have tried to connect that discourse with that in present times, such as by Martin Heidegger, and with the new realization of the consequences that we have entered the Anthropocene today with all kinds of unforeseeable consequences. The discourse on nature was omnipresent, whether writers, composers, or artists engaged with it directly or indirectly. This was basically unavoidable and virtually a *conditio sine qua non*. Both the topics of love and physical health/sickness were intricately intertwined with the experiences of the human being in, with, and through nature.

Undoubtedly, countless medieval and early modern poets engaged with nature, either as a space of erotic joys (*locus amoenus*) or a world of social conflicts pitting members of the peasant class against the nobility (Werner the Gardener, *Helm-*

panions to Literature (Cambridge: Cambridge University Press, 2003); William Blake in Context, ed. Sarah Haggarty (Cambridge: Cambridge University Press, 2019).

¹²⁰ C. S. Lewis, *The Discarded Image* (1964; Cambridge: Cambridge University Press, 1994), 99.

¹²¹ See the compact and dense article, divided up into thematic and chronological subsections, by A. Maierù, "Natur," *Historisches Wörterbuch der Philosophie*, ed. Joachim Ritter and Karlfried Grunder. Vol. 6: *Mo–O* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1984), 447–55.

brecht, ca. 1260/1270; William Langland, *Piers Plowman*, ca. 1380). But that approach was not so much focused on nature itself, but on human actions in nature.¹²²

What mattered, however, for a more global interpretation, was both the didactic and the theological interpretation of nature, and thus the interaction between people and nature. Nature has never been simply nature; it has a history, it is filled with symbolism, and hence carries numerous functions and forces or elements perceived by people as their surrounding and used by them. Many times, people were also forced to protect themselves from nature as a power that could easily overwhelm and destroy them, as the history of catastrophes tells us (Boccaccio, *Decameron*, ca. 1350; Marguerite de Navarre, *Heptaméron*, 1558/1559; Heinrich von Kleist, “Das Erdbeben von Chili,” 1807, and so forth). We face, hence, the dialectics of the idyll and terror, of fertility and productivity on the one hand and destruction and death on the other, all critical components of the fundamentals of medieval and early modern (probably also modern) culture.

Der Stricker, *Pfaffe Amîs*

Let us finish with one final and truly fascinating literary example that strikingly illustrates the difficult and complex interactions between humans and nature and clearly signals that for people it has always been highly difficult fully to understand nature because of its sheer quantity or virtual infinitude. Little known outside of research on German medieval literature, Der Stricker’s Middle High German *Pfaffe Amîs* (ca. 1230/1240) was one of the first narratives where this dilemma between human existence and the natural environment finds dramatic but also satirical expression. The protagonist, an English priest who soon turns into a rogue and enjoys playing pranks with other people, is challenged early on by his bishop because he spends the Church property too generously on his guests.

To examine his qualifications as a priest, which would be a way for him to fire Amîs from his post, the bishop poses several obviously absurd questions that matter in our context. He wants to know, for instance, how much water there is in the sea (singular!), and Amîs mentions a certain arbitrary quantity. The bishop does not want to and actually cannot believe him, but since he cannot plug all rivers emptying into the sea, there is no way for him to verify or falsify the response because the task set is foolish and absurd by itself. The same applies to the

¹²² See the contributions to *Rural Space in the Middle Ages and Early Modern Age: The Spatial Turn in Premodern Studies*, ed. Albrecht Classen, with the collaboration of Christopher R. Clason. *Fundamentals of Medieval and Early Modern Culture*, 9 (Berlin and New York: Walter de Gruyter, 2012).

questions where the middle of the earth is located (of course, anywhere since it is a globe) or what the distance is between heaven and earth (so short that one can communicate fairly easily from one side to the other). The bishop also wants to know the size of heaven.

In many ways, Der Stricker reflects already early modern rationality, if not postmodernity (!) because the priest's responses signal a new awareness of the natural world that cannot be quantified easily, if at all.¹²³ It hardly needs mentioning that the bishop exposes his own foolishness and hence the ignorance of the upper Church clergy through this ridiculous examination. Not only are the questions meaningless, they also indicate an utter lack of understanding of how to approach and perceive nature properly in an Aristotelian fashion, which had become standard among many philosophers already since the twelfth century.¹²⁴ Amis is, of course, not a modern scholar, but he ridicules traditional scholastic methods of analysis and attempts by the highly-ranked ecclesiastics to establish their authority thereby. He is even required to teach a donkey how to read, With the help of a trick he can demonstrate at least that the animal knows how to turn the pages of a book with its tongue, the first sign of having learned a primary lesson.

Stricker's *Pfaffe Amis* was later imitated in parts by the Brunswick toll official Hermann Bote who composed the hilarious, satirical collection of *Till Eulenspiegel* (first printed in 1510/1511) and has his protagonist, also a rogue, face the same kinds of questions at the university of Prague and answering the same way, putting the rector and all his colleagues to shame. Both works express major criticism of pre-modern scholasticism and thus indirectly laid the foundation for modern sciences in turn.¹²⁵

123 Der Stricker, *Der Pfaffe Amis: Mittelhochdeutsch/Neuhochdeutsch*, ed. Michael Schilling (Stuttgart: Philipp Reclam jun., 1994); cf. Albrecht Classen, "'Detail-Realismus' im deutschen Spätmittelalter. Der Fall von des Strickers *Daniel von dem Blühenden Tal* und Konrads von Würzburg *Turnier von Nantes*," *Studia Neophilologica* 64 (1992): 195–220; id., "Exploration of Rationality: The Stricker's Contributions to the Intellectual Revolution in the Thirteenth Century, or, the Transformation of the Arthurian World," *Arthuriana* 32.3 (2022): 21–40. See also Bee Yun, "Das Komische, das Moralische und das Politische: der 'Pfaffe Amis' in der Gedankenwelt der Stauferzeit," *Archiv für Kulturgeschichte* 103.2 (2021): 335–73. The perspective on the natural sciences, as outlined in the early part of this collection of jest narratives, does not seem to have attracted much attention. I have translated the text into English, which will be published in *New Literaria* in Fall of 2024 (online).

124 Robertson, *Nature Speaks* (see note 10); Renner, *Konzeptionen von Philosophie im 12. Jahrhundert* (see note 27).

125 *Ein kurzweilig Lesen von Til Eulenspiegel*. Nach dem Druck von 1515, ed. Wolfgang Lindow (Stuttgart: Philipp Reclam jun., 1966), no. 28, 82–85. There are many studies on *Eulenspiegel*; see, for instance, Werner Wunderlich, "Till Eulenspiegel: Zur Karriere eines Schalksnarren in Geschichte und Gegenwart," *Monatshefte für Deutschen Unterricht, Deutsche Sprache und Literatur* 78.1 (1986): 38–47.

Final Observations

Certainly, medieval writers and artists tended to emphasize the symbolic or allegorical meanings of animals and plants, for instance, but those strategies were not naively driven by the desire to unearth the “fabulous or unusual qualities,” as a recent author on the history of swans has opined.¹²⁶ Instead, that allegorical reading method from the *Physiologus* to Thomas de Cantimpré and later was simply a unique strategy to make sense of the natural observations and to go beyond the mere physical and mechanistic dimensions. Considering our human inability to come to terms with nature even today in face of earthquakes, tsunamis, volcanic eruptions, or draughts, and this despite enormous progress in the natural sciences, should humble us and alert us to the need to be more respectful regarding pre-modern interpretations of nature. As much as various types of human behavior and operations are threatening our natural environment in the present time (Anthropocene), we are far away from having a full understanding of nature and its infinite forces.

As the continuous fascination with the narrative motif of Melusine throughout the Middle Ages and the early modern age indicates, if not until today (now under the label of Undine and other water creatures), nature does not easily yield its secrets. Despite our best natural sciences today, the intrigue, the mystery, the ineffable, and the spiritual within nature have not been disenchanting, contrary to Max Weber’s famous opinion in that regard (1904/1905; revised in 1920). After all, the Socratic paradox still holds true; the more we know of nature, the less we really understand it. This applies both to nature here on earth and to nature in outer space.¹²⁷ As much as people throughout time have tried hard to control and dominate the sea, for instance, the maritime power continues to be far beyond all human efforts to contain it.¹²⁸

¹²⁶ Natalie Jayne Goodison, *Introducing the Medieval Swan* (Cardiff: University of Wales Press, 2022), 17. She is, however, entirely correct in pointing out that the swan mattered already in antiquity and was discussed by learned authors throughout times. Their purpose was commonly to bring out the moral meaning of a creature representing human vices and virtues. See the vast tradition of bestiary literature or fable narratives. Cf. the contributions to *Beasts and Birds of the Middle Ages: The Bestiary and Its legacy*, ed. Willene B. Clark and Meredith T. McMunn. Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 1989).

¹²⁷ Hans-Dieter Mutschler, *Naturphilosophie* (Stuttgart: Kohlhammer, 2002); cf. also the contribution to this volume by Reinhold Münster. In other words, post-modern natural science might be able to profit considerably from pre-modern concepts of nature in rather surprising ways.

¹²⁸ See the contributions to *Thalassokratien im Mittelalter*, ed. Nikolas Jaspert and Jan Rüdiger. Mittelmeerstudien, 25 (Paderborn: Brill Schöningh, 2024). The editors point out, for instance, “das Meer kommt von außen, es ist unbeherrschbar; es bedroht menschliche gesellschaftliche Struk-

Jürgen Habermas formulated this recently in lucid terms:

Without engendering a worldview of its own, postmetaphysical thinking navigates between religion and natural science, social science and the humanities, culture and art, in an attempt to eliminate errors and illusions from our customary self-understanding through reflection on these empirical forms of objective mind, and in the process also to explore its own limits – no more, but also no less. It is precisely in this parasitic role of a form of reflection that refers to *other*, already existing, *cultural traditions and practices* that philosophy can make transparent the connections between what is known and half-known in a civilization and open them up to critical examination.¹²⁹

Perhaps this insight that certainly needs further explorations, might ultimately also facilitate more approximations between the sciences and the humanities through post-modern epistemology leading to renewed historical, literary, artistic, philosophical, and theological investigations of nature in its relationship with people. If we want to survive the Anthropocene, which does not look so likely in the larger schema of things,¹³⁰ then this rediscovery of nature as an agency by itself, as explored by countless pre-modern thinkers and artists, might proffer a reasonable and practical approach for our future engagement with the physical environment (for a concluding illustration, see Fig. 2).

turen, deren naturräumlicher Ort das Festland ist" (2; the sea comes from outside; it is indomitable; it threatens human social structures that have as their natural space/basis the firm land). See also my review in *Mediaevistik* 36 (forthcoming). Cf. also Rabea Kohnen, "‘Über des wilden meres flut.’ Thalassographie und Meereslandschaft in den mittelhochdeutschen Brautwerbungserzählungen," *‘Landschaft’ im Mittelalter?* (see note 17), 85–103.

129 Jürgen Habermas, *Also a History of Philosophy*. Vol. 1: *The Project of a Genealogy of Postmetaphysical Thinking*, trans. by Ciaran Cronin (2019; Cambridge and Hoboken, NJ: Polity Press, 2023), 42. As he later emphasizes, "The mythical narratives do not merely process observations and say something about the world; they reflect the psychodynamics of interactions with the world. Therefore, they are inherently structurally ambiguous in that they serve to communicate with the world as well as to communicate *about it*. Myths always also serve to cope with the practical problem of being at the mercy of the contingencies of an uncontrolled environment [nature?]. The causes of uncontrolled threats call for an interpretation with the available narrative framework of communication, purpose setting and instrumental action, active and passive, attack and defence" (139)

130 See now the voluminous study (1023 pp.) by Peter Frankopan, *Zwischen Erde und Himmel. Klima – eine Menschheitsgeschichte*. Trans. from the English by Henning Thies and Jürgen Neubauer (2023; Berlin: Rowohlt, 2023); for an excellent and detailed review, see Swen Schulte Eickholt in *Literaturkritik.de* 1 (Jan. 2024); online at: https://literaturkritik.de/public/rezension.php?rez_id=30191. The reviewer concludes that, following Frankopan, humanity is probably not going to do enough to fight the consequences of the Anthropocene because we enjoy our wealth and comfort too much and because the narrative of the climate change is too disruptive and absurd for us at large to handle it in practical terms. We live and strive because we believe in some kind of future. Once the world might become uninhabitable, as Frankopan projects, then all our lives will become utterly meaningless.

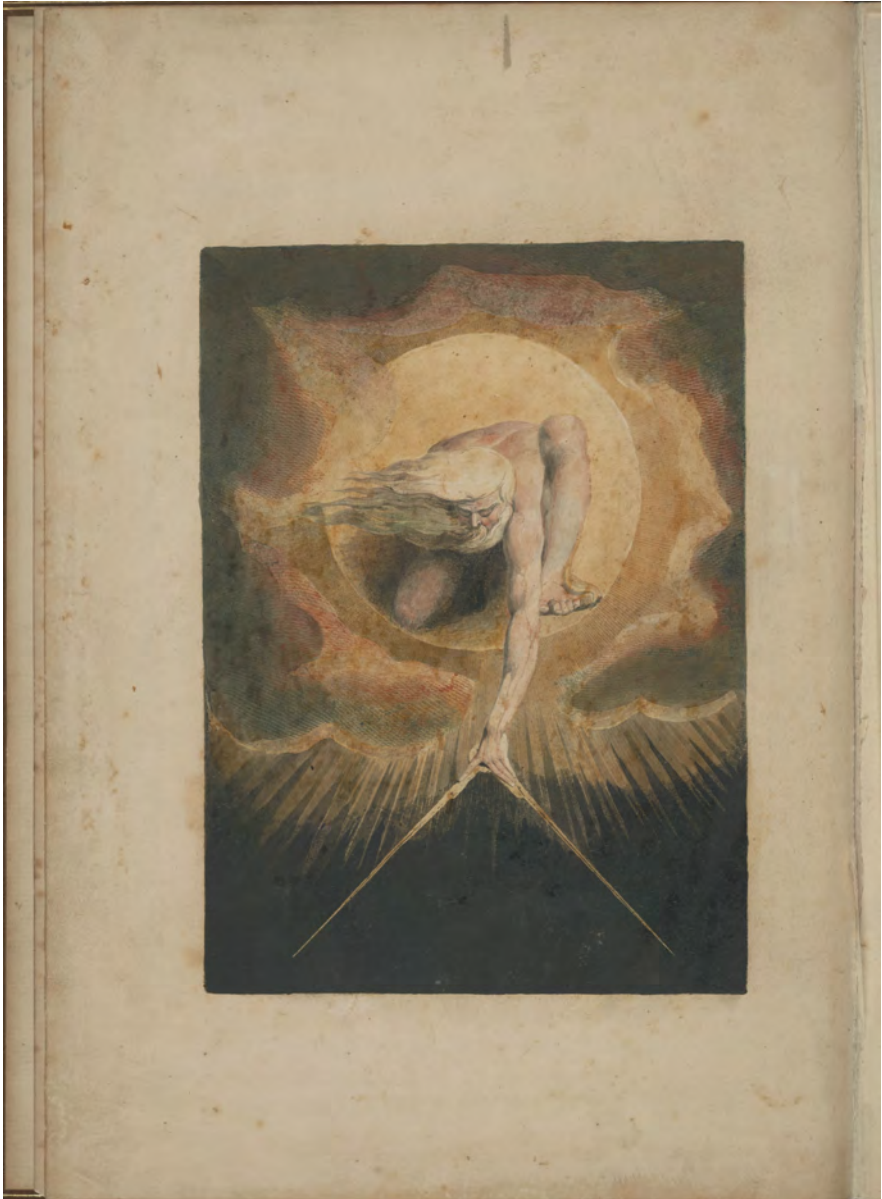


Fig. 1: William Blake, "Ancient of Days," 1794, public domain.



Fig. 2: Since I live in the semi-arid Sonoran desert (southern Arizona and northern Mexico), which is highly attractive and dangerous at the same time, it seems appropriate to conclude with one of my own photos to illustrate the dialectics of this ambivalent, precarious relationship between humans and the physical environment (northwestern Tucson Mountains, Nov. 2023).

Fidel Fajardo-Acosta

Unnatural Humans: The Misbegotten Monsters of *Beowulf*

Abstract: This essay claims that the medieval Anglo-Saxon epic poem, *Beowulf*, is centrally concerned with the problem of the unnatural and the monstrous as a perversion of nature – most visible in the killings and destructive behavior of monsters like Grendel, Grendel’s mother, and the dragon. Such creatures are characterized as enemies of God and threats to both the natural world and human society. The unnatural in *Beowulf*, however, is not limited to these monsters. The inspiration of the poet is profoundly biblical and critical of ancient and medieval Germanic values and ways of life, namely, violence and intemperance, battles and weapons, looting and pillaging, boastful pride and the cult of personal honor, incest, bestiality and other sexual perversions, as well as the hoarding of gold, silver, and other treasures. Looking at *Beowulf* and its Scandinavian parallels through the lens of their biblical sources – particularly apocryphal and pseudepigraphical works like the *Book of Jubilees* and the *Book of Enoch*, as well as ancient and medieval rabbinical commentaries like the *Pirkê de Rabbi Eliezer* – it can be argued that the Anglo-Saxon epic and its Scandinavian counterparts were meant by their authors to expose Germanic warrior-culture as contrary to nature and the order of God’s creation. Drawing from biblical stories about giants, “the heroes of old, men of renown” (Genesis 6:4), and their near extermination in the Great Flood, *Beowulf* and other medieval heroic narratives unequivocally predict the dark future of martial heroes and monsters alike, all doomed to perish in the great battles at the end of the world, Ragnarok, Armageddon, and other forms of fiery apocalypses manifesting God’s wrath. The biblical texts and their medieval offshoots further suggest that, after those great catastrophes, the proud and the strong will be eliminated, but life will go on for the meek and the humble, as nature, including human life, is set free from the exploiters and the predators that endanger it.

Keywords: Beowulf, Old Testament, Apocrypha, Pseudepigrapha, Midrash, Enoch, Jubilees, Cain, biblical giants, incest, miscegenation, bestiality

Nature and Human Society

The vital links between nature and the lives of humans are a major concern of people living in the twenty-first century, particularly because of the damage humans have done to nature, which inevitably has translated into a threat to the existence of humanity itself:

Ecocritical issues have . . . grown in importance to a level at which we seem to have already reached the point of no return, with all of us living in the Anthropocene, the last stage of our earth during which we as people have begun to impact our natural environment so negatively that our own survival might be at stake.¹

Driven by the profiteering and predatory spirit of colonialism, imperialism, and the globalization of the free-market economy, humans, since the early modern period, have harvested, with remarkable efficiency, every resource susceptible to marketing and monetization. As a result, the bulk of humanity has grown, by leaps and bounds, in numbers, in wealth, in cultural sophistication, and also in rates of production, consumption, and depletion of natural resources. In our own time, Artificial Intelligence (AI), an industrial revolution of the profit-seeking mind, is making sure the harvest leaves absolutely nothing behind, that all resources, on a universal scale and without exception, including the innermost recesses of the human body and psyche, are fully mined, exploited, and processed into money. Such absolute “rationality,” however, is proving to be absolutely irrational, indeed flawlessly efficient in destroying all of life, nature, and people included. The not-artificial sort of intelligence, let’s call it NAI, has been alerting us to the problem for a very long time, reminding us that humans are part of nature and that nature cannot be walled off, displaced by great cities, or replaced by robotic mechanisms that resemble living beings but are not actually alive. Alexa, or Siri, is a dead and creepy thing, an illusion with no substance and no future, other than that of the vanishing echoes of what once existed. I do not want to talk to Alexa, and, believe me, neither do you. The risks of surrendering our humanity, reasoning, knowledge, and choices to inhuman and unnatural, also predatory,

¹ Albrecht Classen, “Literature as a Tool of Epistemology: Medieval Perspectives for Post-Modernity Or, the Post-Modern World Long Anticipated by the Pre-Modern: Boethius’s *De consolatione philosophiae*, Apollonius of Tyre, Marie de France, and Ulrich Bonerius,” *New Literaria* 1.2 (2020): 1–19; here 4; <https://newliteraria.com/articles/v01i2/v01i2-01.pdf> (last accessed on Dec. 17, 2023). See also id., “Introduction” to this volume; Jeremy J. Schmidt, *Water and the Anthropocene: Abundance, Scarcity and Security in the Age of Humanity* (New York: New York University Press, 2018); Reinhold Münster, “The Anthropocene, Technology and Fictional Literature,” *Humanities* 9.56 (2020): 1–12, <https://www.mdpi.com/2076-0787/9/3/56> (last accessed on Nov. 30, 2023).

mechanisms are way too real. Ancient and medieval texts like *Beowulf*, and the biblical traditions that inform it, offer us valuable meditations on those dangers, in particular the ways in which the worship of brute force and domination, the devouring of resources, and the craving to amass lifeless treasures, are sure ways to bring about the end of human life and potentially of all of nature.

The concern with the threat that predatory, ambitious, proud, and greedy humans pose to nature is as old as writing itself. The preoccupations are manifested in the apocalyptic literary genre, including stories of floods, fires, volcanic eruptions, earthquakes, pestilence, and other catastrophes that writers have deemed to be unequivocally anthropogenic. The pre-scientific mind in fact reasoned in the same way as its responsibly scientific counterpart, blaming humans themselves for natural disasters. Premodern people assumed that catastrophes occurred because sinful humans – violent, greedy, intemperate, proud, lustful, cruel, loud, and unruly – angered the gods. The *Epic of Gilgamesh* manifested those worries, as well as the Bible, which borrowed the Noah story from Sumerian and Babylonian Great Flood narratives, where figures like Gilgamesh represented the persistence of the problem, even after the Flood.²

Surely, modern science tells us ancient people were wrong about the causes of natural disasters because they did not understand how nature works. But however erroneous their perceptions of the mechanics of the natural world, they came up nevertheless with rather similar conclusions as later scientific research would do, then based on more accurate observations and empirical evidence. We could chuck it to just coincidence but, given the commonality of concerns between modern and pre-modern minds, perhaps we should consider that our unscientific forebears might have been on to something.

As Albrecht Classen has reminded us, ancient and medieval literary works might in fact be a mode of cognition and reasoning which, in their own imaginative ways, offer not in the least insignificant insights that could prove to be of

2 *The Babylonian Gilgamesh Epic*, ed. Andrew R. George. 2 vols. (Oxford and New York: Oxford University Press, 2003). The Bible is an intermediary between much earlier Mesopotamian myths – that also informed the mythologies of Canaanites, Hittites, Greeks, and others – and the ideas of medieval peoples, Christians and non-Christians, of the Middle and Near East and Europe. The Judaism of the post-exilic period, in particular, was shaped by a range of Babylonian influences, such as the ideas carried back by those returning to the homeland and the continued communication between them and those who stayed in Babylon: Hermann Gunkel, *Schöpfung und Chaos in Urzeit und Endzeit: eine religionsgeschichtliche Untersuchung über Gen 1 und Ap Joh 12* (Göttingen: Vandenhoeck & Ruprecht, 1895), 131. Mesopotamian myths are preserved in creation stories such as the *Epic of Anzu* and the *Enuma Elish*, the Babylonian creation story, both texts in *Myths from Mesopotamia*, ed. and trans., Stephanie Dalley. Revised Edition. Oxford World's Classics (Oxford and New York: Oxford University Press, 2000), 203–27, 228–77.

relevance to the lives of postmodern peoples: “We face, after all, universal wisdom in these late antique and medieval narratives, wisdom which we need today perhaps more than ever in a world determined by a chaotic, disjointed, irrational, frantic, and disoriented post-modernity.”³

It might seem surprising that ancient peoples, who lived in a world teeming with nature and its creatures, would worry about humans causing a catastrophe of global proportions and threatening all life. Ancient humans, however, just like modern ones, were perfectly capable of overharvesting their resources, overpopulating their habitats, hunting down animals into extinction, killing each other over property, territory, and dominance, also waging vicious wars which often resulted in the elimination of whole tribes.⁴ Modern stupidity didn’t pop out of nowhere. The bad tendencies of humans are the reason why codes of law and morality came into being, also religion. All legislating and moralizing, however, originated in the lessons learned from old stories, i.e., from the experiences of our ancestors, the history we should not want to repeat.

The awareness of the relations between character and fate, choices/actions and destinies, emerged indeed from ancient tales involving hubris, selfishness, self-indulgence, lack of restraint, and the disregard of the well-being and integrity of others. Literature in that sense is a compendium of all the knowledge about human life, and its potential futures, accumulated since remote antiquity. Understandably, the giants who rule our world often object to literature and humanistic studies, which they deem not just useless but downright detrimental to their “strategic planning” and their aims of endlessly increasing their wealth and power. Vociferously demanding that education be focused only on the so-called STEM subjects (Science-Technology-Engineering-Mathematics), they spare no effort maligning critical thinking and berating the literary, philosophical, and ethical meditations that expose the vanity and emptiness of their lives and their objectives.⁵

3 Classen, “Literature as a Tool of Epistemology” (see note 1), 16; also, Albrecht Classen, *Wisdom from the European Middle Ages: Literary and Didactic Perspectives. A Study, Anthology, and Commentary* (Berlin: Peter Lang, 2022).

4 “In *Atrahasis* [Old Babylonian version, ca. 1700 B.C.E.] the Flood was sent by the gods in order to reduce overpopulation, . . . [in] an early Greek poem, the *Cypria* . . . Zeus planned to reduce overpopulation by war. . . . In the Priestly account of the Flood in Genesis, and in Ovid’s *Metamorphoses*, man’s wickedness is the cause of divine anger which results in the Flood. In Gilgamesh the Flood story is reused . . . to mark the time in history after which it was no longer possible for a mortal to win immortality. The Flood is also important for Mesopotamian tradition because it marks the end of the period when true sages lived on earth and brought to mankind the arts of civilization from the gods”: Dalley, *Myths from Mesopotamia* (see note 2), 5.

5 As Albrecht Classen notes, “[t]here is nothing wrong with STEM, except the conviction that they have a global and exclusive claim on the entire academy, or the school system, which

Like his modern counterparts, also living in post-diluvian times, Gilgamesh was such a giant. He aspired to immortality but abused his own people, killed, raped, looted other lands, cut down forests, hunted down animals, built a great city defended by massive walls, boasted of his strength, insulted the gods, smashed to pieces the *šūt abni* (X.157; “things of stone”; likely tablets inscribed with vitally important wisdom) that allowed the boatman Urshanabi to cross the “waters of death,” and then was surprised to find out that the gods were not pleased and denied him immortality.⁶ Great heroes like Gilgamesh abound in ancient, and also modern, narratives telling of both pre- and post-diluvian heroes. Because of their physical strength and ferocity, they were, and are, considered giants, relative to average humans, “[t]he Nephilim were on the earth in those days . . . They were the heroes of old, men of renown” (Genesis 6:4 NIV).⁷ They were also the reason why God sent the Great Flood to exterminate them, though of course they reappeared after the Flood, and are still among us.

It is interesting that, at least as far as the Great Flood itself was concerned, only Noah (or Ziusudra, Atrahasis, Utnapishtim, as the Sumerians, Akkadians, and Babylonians variously called him) was warned in advance and given the chance to survive by making preparations for the disaster.⁸ The reasons why

sounds, polemically speaking, as if from now on only one side of the human brain would matter. All efforts to handle critical aspects in our lives depend on complexity and multiplicity, open-mindedness, and the awareness of the relevant technical or cultural context. Both the sciences and the humanities require critical thinking, analytical skills, the ability to collect data, to formulate the findings in a rational and meaningful manner, and to create a relevant context for the conclusions”: “STEM and Teaching German Language and Literature with an Interdisciplinary Approach: Eighteenth-Century Reports by German Jesuit Missionaries in the German Classroom,” *Die Unterrichtspraxis* 51.1 (2018): 53–62.

6 Gilgamesh is a figure of the days after the Great Flood, who visits the Flood survivor, Utnapishtim, in order to learn from him the secret of immortality. Andrew George interprets the “things of stone” as the sailors of Urshanabi’s boat. In Hittite sources they are a pair of stone statues in the boat, which suggests their meaning is symbolic. As symbols, the “things of stone” are likely references to stone tablets inscribed with the wisdom necessary to guide the “boat” of a person’s life safely over the “waters of death” and toward the secret of eternal life, which is embodied in the figure of Utnapishtim/Noah, who saves living beings from the Flood, in turn pointing to the nurturing of nature and its vitality as the substance of that wisdom: *Gilgamesh* (see note 2), 1: 501–2, 688.

7 *Holy Bible. New International Version (NIV)* (Palmer Lake, CO: Biblica/International Bible Society, 2011), online at BibleGateway.com (last accessed on Oct. 30, 2023).

8 “Extra-wise” is the meaning of his name in *Atrahasis* [ca. 1700 B.C.E.]; he is Utnapishtim and Uta-na’ishtim in *Gilgamesh*, a name which can mean ‘He found life.’ Sumerian Ziusudra is an approximate translation of Akkadian Ut-napishtim together with his epithet, in which the element *sudra* corresponds to Atrahasis’ epithet *rūqu*, ‘the far-distant.’ The name used by Berossus for the survivor of the Flood is Xisuthros, . . . Prometheus, Deucalion’s father, may possibly be an

“Noah found favor in the eyes of the Lord” (Genesis 6:8) are rather obvious. Noah is humble and obeys God’s commands. He does not destroy life. He saves living creatures, the opposite of what the Nimrods do. Noah’s preservation of what God created is perhaps one of the first recorded acts of environmental conservation intended to rescue living things from the disasters caused by human depredations. By saving the animals and also humanity, Noah saves nature, thus countering the damage done by unnatural monsters such as the giants.

The Natural and the Unnatural

The natural and the unnatural is the difference between people of wisdom like Noah and the mighty giant-heroes of heroic narratives, like Gilgamesh, the biblical Nephilim, and Beowulf himself. In the English language, the word “nature” has been in use since the Middle English period. In its most relevant existential senses, “nature” is “the creative and regulative power which is conceived of as operating in the material world and as the immediate cause of its phenomena” and “the phenomena of the physical world collectively; . . . plants, animals, and other features and products of the earth itself, as opposed to humans and human creations.”⁹

In terms of its etymons, English *nature* is derived from Latin *nātūra*, a noun formed from the verb *nascor*, *nātus*, *nasci* = “to be born,” “to be begotten,” “to come into existence”; cognate with Greek, γεννάω (“to beget”), γένεσις (“origin,” “source,” “manner of birth”) < Proto-IndoEuropean **ǵen-* (“to generate,” “to beget”). Similarly, the Greek word for nature, φύσις, signifies “origin,” “birth,” “growth,” “originating power.” It is cognate with English “to be” and Old English *bēon* < Proto-Indo-European **bheu-* (“to grow,” “to thrive,” “to exist”).¹⁰ The word “nature” then has much to do with what comes into being, thrives, grows, and continues to exist

approximate Greek translation of Atrahasis, and it is just possible that an abbreviation of (Uta)-na’ish(tim) was pronounced ‘Noah’ in Palestine from very early times”: Dalley, *Myths from Mesopotamia* (see note 2), 2.

⁹ “nature, n.”: *Oxford English Dictionary* (OED Online) (Oxford: Oxford University Press, 2023), <https://www.oed.com/view/Entry/125353> (last accessed on Jun. 15, 2023).

¹⁰ “*nātūra*”; “*nascor*”: Charlton T. Lewis and Charles Short, *A Latin Dictionary* (Oxford: Clarendon Press, 1879). “*γεννάω*”: Henry George Liddell and Robert Scott, *A Greek-English Lexicon*. Rev. Henry Stuart Jones and Roderick McKenzie (Oxford: Clarendon Press, 1940). Both online at *Perseus Digital Library*, ed. Gregory R. Crane. Version 4.0/Perseus Hopper (Medford and Somerville, MA: Tufts University 1992–2022). <https://www.perseus.tufts.edu/> (last accessed on May 27, 2023). “**ǵen-*”; “**bheu-*”: Julius Pokorny, *Indogermanisches etymologisches Wörterbuch* (Bern and Munich: Francke, 1959–1969).

over time. By opposition, the unnatural is what decays, does not beget or otherwise regenerate, dies, and ceases to be, for good.

What the OED calls the “creative and regulative power,” which both operates and is the cause of nature and its phenomena, was, to the medieval mind, God himself. Nature, in that sense, is God’s creation. Accordingly, the first natural act is that of *genesis*, the subject of the opening verses of the Hebrew Bible: בָּרָאשִׁית (bārêšît bārā’ elōhîm haššamayim wə’et hā’āreš) (Genesis 1:1; In the beginning God created the heavens and the earth [NIV]).¹¹ In Hebrew, *bārā’* is “to create,” “to make,” in this case, both heaven and earth, the world, the cosmos, all created things (בְּרִיאָה *brî’â*).¹² That created world, in Genesis, is also defined as being good, טוֹב *tôwḥ* (1:9). The action of divine creation is confined, however, to God only. Created things cannot engage in the *bārā’* associated with the word of God. All that created things can do is engage in what is natural to them, as assigned by God according to, indeed, their natures, their specific constitutions, their orders, their genera, and their species. Preserving and staying within the boundaries of that order is fundamental to the natural, which becomes unnatural when it transgresses the boundaries of its given place in God’s creation. The natural then is what is required for a thing to exist, continue, and evolve, moving toward its *telos*. The unnatural, on the other hand, is something that at some point transgresses the limits of the natural and becomes corrupt, no longer in harmony with the mechanisms by which existence is sustained. A monster is the archetype of the unnatural, a misshapen, misbegotten, malfunctioning thing whose activity is problematic and whose tendencies are destructive and self-destructive, contrary to the principles of creation.¹³

11 Hebrew text and transliteration: *Interlinear Bible* (Glassport, PA; BibleHub/Biblos.com, 2018), <https://biblehub.com/interlinear/genesis/1.htm> (last accessed on Nov. 25, 2023). Further quotations of the Hebrew text of the Bible are from the same source, unless otherwise specified.

12 Hebrew בָּרָא *bārā’* (Strong 1254), “to create.” בְּרִיאָה *brî’â* (Strong 1278) is “a creation,” “that which is created.” טוֹב *[tôwḥ]* is the adjective, “good” (Strong 2896): James Strong, *The New Strong’s Expanded Exhaustive Concordance of the Bible* (Nashville, TN: Thomas Nelson, 2010), <https://www.blueletterbible.org/lexicon/>. All subsequent references to this source are denoted by the word “Strong” followed by the lexical item number in *Strong’s Concordance*. Also, *Interlinear Bible* (see note 11) (last accessed on Aug. 18, 2023).

13 Albrecht Classen relates the monstrous to the alterity by which existence and identity are secured. While observing a great deal of variation in the representation of the Other in medieval texts, he observes that, in early works, such as the Latin lives of sixth-century figures like St. Brendan and St. Columba, “monsters of all kinds . . . are regularly eliminated and removed as a threat to the protagonist. In fact, the protagonist proves him/herself by defeating and eliminating that monster.” As Classen further notes, a situation like that of *Beowulf* and the dragon killing each other suggests that “[t]he struggle against monsters . . . emerges as an existential endeavor, and each person, so to speak, has to find his/her own monster and defeat it in order to gain the

As God's creation, then, nature is good. The unnatural, on the other hand, as a corruption of nature, is evil and results in exclusion from nature and being altogether, finally fulfilling its destiny in non-being.¹⁴ In the canonical Genesis, nature is first corrupted when the serpent seduces Adam and Eve. The transgression is dietary, the eating of a forbidden foodstuff, and economic, as a failure to observe limits in consumption. Having upset the delicate equilibrium of the natural order, Adam and Eve are exiled into a world of scarcity, suffering, and death. In the Bible then, humans, who observe no limits in what they eat and consume, become corrupt and unnatural, doomed to death, no longer endowed with the ability to exist in sustainable and renewable ways.

In *Beowulf*, the Grendel pair living in exile in the wilderness is not just an analogue of the first humans driven out from the Garden of Eden, but are also voracious giants and cannibals that disrupt the order of human society. They are also literally said to be descendants of Cain – “Cāines cynne” (l. 107; kin of Cain; also 1261–66)¹⁵ – humans perverted by the crimes of their ancestors – Adam, Eve, and Cain – whose transgressions include not just sinful forms of consumption but also the killing of their own kin, i.e., other humans, which, in the case of Cain, results in further exile. The matter of food consumption is doubly stressed in *Beowulf* by the significant fact that Grendel's feasting takes place precisely in Hrothgar's banquet hall, to which he is attracted by the din of the celebrations that take place there: “þæt hē dōgora ġehwām drēam ġehyrde / hlūdne in healle” (88–89; for each day he heard the revelry, loud in the hall). Heorot Hall in a symbolic sense points to the intemperance and Cain-like fratricidal killings that characterize the lives of the Danes that the monster besieges – Grendel constituting the

own self”: “The Epistemological Function of Monsters in the Middle Ages: From *The Voyage of Saint Brendan* to Herzog Ernst, Marie de France, Marco Polo and John Mandeville. What Would We Be Without Monsters in Past and Present!” *Lo Sguardo: Rivista di filologia* 9.2 (2012): 13–34; here 19–20.

¹⁴ The idea that evil has no reality of its own and is only a perversion of the good which causes it to become non-existent over time was common in patristic literature, including Augustine, Ambrose, Gregory of Nyssa, Basil of Caesarea, and also in neoplatonic and other philosophers like Plotinus and Boethius. “Basil . . . describes evil as ‘not a living essence (οὐχὶ οὐσία ζῶσα), but a disposition of the soul opposed to virtue, resulting through a falling away from the good’”: Alden A. Mosshammer, “Non-Being and Evil in Gregory of Nyssa,” *Vigiliae Christianae* 44 (1990): 136–67; here 136, 145. J. Patout Burns, “Augustine on the Origin and Progress of Evil,” *Journal of Religious Ethics* 16.1 (1988): 9–27.

¹⁵ Anglo-Saxon text of *Beowulf* in the standard and most up-to-date edition of Frederick Klaeber's work: *Klaeber's Beowulf*, ed. R. D. [Robert Dennis] Fulk, Robert E. Bjork, and John D. Niles. Fourth Edition (Toronto, Buffalo, NY, and London: University of Toronto Press, 2008).

symbol of the monstrous vices tearing Danish society apart.¹⁶ The murderous actions and the cannibalism of the Grendels reflect then both the matter of the eating of forbidden foodstuffs, the sin of Adam and Eve, and that of their son, Cain, who commits the first murder.

Interestingly, the allowed foods in the Garden of Eden are vegetarian and capable of seed-based reproduction. Genesis is specific in the identification of plants and fruits as the proper food of both humans and animals (Genesis 1:29–30 NIV)¹⁷ The eating of flesh is not explicitly prohibited, but the silence about it is telling, suggesting a possible meaning of the forbidden fruit that has no seed in it. It is intriguing in that respect that Adam and Eve leave the Garden of Eden wearing animal skins as clothing, further adding to the suspicion that the transgression likely involved the killing and eating of a living creature, an act so hideous that it is, apparently, unspeakable, at least at this early stage in the biblical narratives, when humans are in the early stages of their loss of innocence.¹⁸

Matters get worse in the following generation, as Cain murders his own brother, Abel, and is therefore exiled. God immediately prohibits any further murder, by means of the mark of Cain, which stipulates that, “anyone who kills Cain will suffer vengeance seven times over” (Genesis 4:15). Clearly, killing, the

16 Fidel Fajardo-Acosta, “Intemperance, Fratricide, and the Elusiveness of Grendel,” *English Studies* 73.3 (1992): 205–10. Such concerns continued to shape English literature beyond the Middle Ages, as seen, for example, in the conversation of Hamlet with his friend Horatio, where Hamlet admits the drunkenness of the Danes to be a time-honored but shameful custom, “more honored in the breach than the observance” (I.iv.18). The judgment is biblical: “Woe to those who rise early in the morning to run after their drinks, who stay up late at night till they are inflamed with wine. They have harps and lyres at their banquets, pipes and timbrels and wine, but they have no regard for the deeds of the Lord, no respect for the work of his hands. . . . Woe to those who are heroes at drinking wine and champions at mixing drinks, who acquit the guilty for a bribe, but deny justice to the innocent” (Isaiah 5:11–12, 22–23 NIV).

17 Gary A. Rendsburg, “The Vegetarian Ideal in the Bible,” *Food and Judaism*, ed. Leonard J. Greenspoon, Ronald A. Simkins, and Gerald Shapiro. Studies in Jewish Civilization, 15 (Omaha, NE: Creighton University Press, 2005), 319–34.

18 That different laws regarding the killing of animals and the eating of flesh were operative before and after the Flood is hinted at in a rabbinical commentary on Genesis 9:3–6: “R. Jose b. R. Abin said in R. Johanan’s name: Adam, to whom flesh to satisfy his appetite was not permitted, was not admonished against eating a limb torn from the living animal [n.4: Since all flesh was forbidden]. But the children of Noah, to whom flesh to satisfy their appetite was permitted, were admonished against eating a limb torn from the living animal,” *Midrash Rabbah*, ed. H. [Harry] Freedman and Maurice Simon. 10 volumes (London: Soncino, 1939), 1: 278. That the transgression of Adam and Eve involved the killing of an animal is also hinted at in other commentaries on Genesis claiming the skin coats that God made for Adam and Eve (Genesis 3:21) eventually found their way to Nimrod, “a mighty hunter before the Lord” (Genesis 10:9 NIV): *Pirkê de Rabbi Eliezer*, trans. Gerald Friedlander. 4th ed. (1916; New York: Sepher-Hermon Press, 1981), Ch. XIV, 175.

destruction of life, is one of the ways in which a living creature becomes unnatural. But killing the killer is just as monstrous, in fact, much more so, than the original killing, at least according to the Bible. The situation is dramatically relevant to that in *Beowulf* as the hero undertakes the killing of the killers, who are not just human, but also descendants of Cain, and hence subject to the stipulations of the mark of Cain – a fact of the biblical story evidenced when Lamech, a descendant of Cain, boasts that he killed a man and that therefore, “If Cain is avenged seven times, / then Lamech seventy-seven times” (Genesis 4:24, NIV). The multiplication of the punishment raises the question of what exactly would be the penalty for the killing of descendants of Cain many generations down the line, as in the killing of the Grendels by the hero, Beowulf.

In biblical history, by the time we get to the generation of Noah, God is fed up with human abuses, their haughtiness, violence and unruliness, which have resulted in the coming about of veritable giants, the Nephilim/Gibborim (Genesis 6:4), kin of Cain in *Beowulf* and in pseudepigraphical biblical texts like the *Book of Enoch* and the *Book of Jubilees*.¹⁹ The latter texts add, in fact, quite a bit of detail to the characterization of the biblical giants, describing them as endlessly voracious, violent, carnivorous and predatory, tyrannical, abusive of not just animals but also humble people, even cannibalistic and sexually perverse, leading to all manner of aberrations in the offspring of bestiality. Accordingly, God sends the Flood to drown the offenders, also a sword for them to use killing one another.

¹⁹ *The Old Testament Pseudepigrapha*, ed. James H. Charlesworth. 2 vols. (Garden City, NY: Doubleday, 1983/1985; New Haven, CT: Yale University Press, 1999/2010). *The Books of Enoch: Aramaic Fragments of Qumrân Cave 4*, ed. J. T. [Józef Tadeusz] Milik (Oxford: Clarendon Press, 1976); *The Book of Enoch or I Enoch*, trans. Matthew Black. *Studia in Veteris Testamenti Pseudepigrapha* 7 (Leiden: E. J. Brill, 1985); *The Ethiopic Version of the Book of Enoch*, ed. R. H. [Robert Henry] Charles (Oxford: Clarendon Press, 1906); *The Slavonic Texts of 2 Enoch*, ed. Grant Macaskill. *Studia Judaica Slavica*, 6 (Leiden and Boston: Brill, 2013); “2 (Slavonic Apocalypse of) Enoch,” trans. F. [Francis] I. Andersen, in Charlesworth, *Pseudepigrapha* (see this note), 1: 91–221; “3 (Hebrew Apocalypse of) Enoch,” trans. Philip S. Alexander in Charlesworth, *Pseudepigrapha* (see this note), 1: 224–315. *The Ethiopic Version of the Book of Jubilees*, ed. R. H. [Robert Henry] Charles (Oxford: Clarendon Press, 1895); *The Book of Jubilees, or, The Little Genesis*, trans. R. H. [Robert Henry] Charles (London: Adam and Charles Black, 1902); James C. VanderKam, *The Book of Jubilees*, 2 vols. *Corpus Scriptorum Christianorum Orientalium*, 510–11; *Scriptores Aethiopici*, 87–88 (Louvain: E. Peeters, 1989); Orval S. Wintermute, trans., “Jubilees,” in Charlesworth, *Pseudepigrapha* (see this note), 2:35–142. *The Book of Giants from Qumran*, ed., trans., Loren T. Stuckenbruck. *Texte und Studien zum antiken Judentum*, 63 (Tübingen: Mohr Siebeck, 1997), 27, 104–09; W. B. Henning, “The Book of the Giants,” *Bulletin of the School of Oriental and African Studies, University of London* 11.1 (1943): 52–74. As noted by Milik, the *Book of Giants* was likely an integral part of the *Book of Enoch* and offered details on the sons of the Watchers whose story is told in *1 Enoch* 1–36: *Books of Enoch* (see this note), 298.

The logic of these stories is fairly transparent and corresponds to a familiar unfolding of events in the history of human societies, as they grow and gradually pollute, devastate, and ultimately cause the failure of the natural environments and resources on which they depend for their existence. In our own current terminology, we would refer to the problem as that of unsustainable, non-renewable economies. Indeed, the biblical stories seem to be about the very recognizable problems of overpopulation, overharvesting, overproduction, overconsumption, violence and killing of humans and animals, unruliness and eating problematic things, likely meat, also multiple sorts of sexual improprieties.

These are, in the Genesis accounts and the pseudepigraphical narratives, the reasons for the destruction of God's creation, the natural world. These are also the exact reasons why our own world today is failing, as nature collapses, consumed by the insatiable human giants, who, once the resources fail, will exterminate each other in the epic wars at the end of the world – Armageddon, Ragnarok, the Apocalypse of fire which is becoming ever more predictable.²⁰

Biblical *Beowulf*

Beowulf may very well be a product of Germanic/Scandinavian folklore issuing from native oral traditions, but it is also a tale deeply steeped in, and clearly growing out of, a long history of literary and religious texts including the Old Testament of the Bible, its apocryphal and pseudepigraphical variants, as well as a host of ancient and medieval rabbinical commentaries and para-scriptural writings with apparently a significant readership among the literate classes of early medieval Europe.²¹ Old Testament and Jewish legends with deep roots in Canaan-

²⁰ The Greek analogues of the biblical giants are the Τιτῆνες (Titans) and Γίγαντες/Gigantas featured in the battles of gods and monsters known as titanomachies and gigantomachies. In that tradition, Ouranos (the Sky) calls his monstrous sons Τιτῆνες (Titans), as they are τριταίνοντες, always straining/striving, and ἀτασθαλίη, full of arrogant presumption (*Theogony*, 207–10). (Pseudo-) Apollodorus, *The Library [Bibliotheca]*, ed., trans. James George Frazer. 2 vols. (Cambridge, MA: Harvard University Press; London, William Heinemann, 1921), 1: 43–47. Hesiod, *Works and Days* and *Theogony*, in *The Homeric Hymns and Homerica*, ed., trans. Hugh G. Evelyn-White (Cambridge, MA: Harvard University Press; New York: McMillan; London, William Heinemann, 1914), 2–65, 78–153; online at *Perseus Digital Library* (see note 10) (last accessed on Nov. 30, 2023).

²¹ That the *Beowulf* poet was aware of Scandinavian lore, including Ragnarok legends, has been and continues to be convincingly argued in recent scholarship, e.g., Chenyun Zhu, “*Beowulf* and Ragnarok,” *Neophilologus* 108.4 (2023): 53–67. The influence on the *Beowulf* poet of the Noachic tradition of the Old Testament apocrypha and pseudepigrapha, particularly the *Book of Enoch* (see note 19) and the *Book of Jubilees* (see note 19) has been pointed out before, most notably by

ite, Greek, and Mesopotamian mythologies²² – particularly the *Book of Enoch* and the *Book of Jubilees*, also the ninth-century rabbinical commentary known as the *Pirkê de Rabbi Eliezer* – may in fact turn out to be much more fundamental to the subject matter and imagery of *Beowulf* than has so far been acknowledged.²³

R. E. [Robert Earl] Kaske, “*Beowulf* and the Book of Enoch,” *Speculum* 46.3 (1971): 421–31; Niilo Peltola, “Grendel’s Descent from Cain Reconsidered,” *Neuphilologische Mitteilungen* 73.1 (1972): 284–91; Ruth Mellinkoff, “Cain’s Monstrous Progeny in ‘Beowulf’: Part I, Noachic Tradition,” *Anglo-Saxon England* 8 (1979): 143–62; and eadem, “Cain’s Monstrous Progeny in ‘Beowulf’: Part II, Post-Diluvian Survival,” *Anglo-Saxon England* 9 (1981): 183–97. Other references and discussion in Fidel Fajardo-Acosta, *The Condemnation of Heroism in the Tragedy of Beowulf: A Study in the Characterization of the Epic*. Studies in Epic and Romance Literature, 2 (Lewiston, NY, Queenston, Victoria, and Lampeter, Wales: The Edwin Mellen Press, 1989), 45–47.

22 In the *Enuma Elish*, the Babylonian epic of creation, the chaos goddess Tiamat (the primordial sea) is the first creator, mixing her waters with Apsu (sweet, underground waters). Tiamat and Apsu are prevented from sleeping by boisterous and unruly younger gods, led by Enlil (prototype of ‘El and the ‘Elohim, Adad/Ba’al-Hadad, and Yaw/Yam, Yahweh, of Canaanite myths) and his brother, Ea/Enki, as well as their respective sons, the warrior-heroes, Ninurta and Marduk. Apsu tries to punish the offenders but is killed by Ea. Tiamat replaces Apsu with her own son, Kingu, who becomes her lover, and retaliates against the younger gods by creating “giant snakes,” “ferocious dragons with fearsome rays, . . . bear[ing] mantels of radiance,” “a *mušhuššu*-dragon,” “a *lahmu*-hero,” “an *ugallu*-demon, a rabid dog, and a scorpion-man, aggressive *ūmu*-demons, a fish-man, and a bull-man”: Dalley, *Myths from Mesopotamia* (see note 2), 237. Representing destructive natural forces those creatures are, however, defeated by the hero Marduk, who dismembers Tiamat and kills her son Kingu, also retrieving from them the “Tablet of Destinies.” In the *Epic of Anzu*, the Sumerian hero Ninurta defeats the monstrous Anzu, a lion-headed eagle representing stormy natural forces, and also recovers the “Tablet of Destinies” that the Anzu had stolen (218). The iconography of storm deities evolved from the earlier imagery of the lion-headed eagle (the Zu or Anzu) and winged lions in battle with bulls or bull-men to fiery flying dragons and bulls, the latter becoming symbols, in later Canaanite mythologies, of the most powerful gods, like El and Adad/Ba’al-Hadad: Antoine Vanel, *L’Iconographie du dieu de l’orage dans le proche-orient ancien jusqu’au VIIe siècle avant J.-C.* Cahiers de la Revue Biblique, 3 (Paris: J. Gabalda, 1965), 11–12, 27, 29, 41, 47–49, 53. Samuel Noah Kramer comments on the relations between Mesopotamian flying dragons and later Christian mythologies, such as the story of St. George and the dragon, linking such creatures with dark angels and demons: *Sumerian Mythology: A Study of Spiritual and Literary Achievement in the Third Millennium B.C.* Revised Edition (Philadelphia, PA: University of Pennsylvania Press, 1961), 77.

23 Such influences are visible even in the earliest Anglo-Saxon writers, including Bede, as noted by Kaske, “*Beowulf* and the Book of Enoch” (see note 21), 422–23. Peltola commented on the unconventional views of Bede in matters of giants and Cain: “Grendel’s Descent from Cain” (see note 21), 287–88. Mellinkoff discussed the evidence of Enochic material circulating in England already in Bede’s days and certainly in the ninth century, “Cain’s Monstrous Progeny, Part I” (see note 21), 160–61. She also noted the relevance to *Beowulf* of specific ninth-century texts like the *Pirkê de Rabbi Eliezer*: “Cain’s Monstrous Progeny, Part I” (see note 21), 148; eadem, “Cain’s Monstrous Progeny, part II” (see note 21), 185–86. The ninth century was indeed a time of known

It is fairly obvious that the epic makes explicit reference to God, Cain and Abel, the biblical giants, the Great Flood, and also criticizes the paganism of the Danes, “whīlum hīe gehēton ll æt hærgratrafum” (175; sometimes they made vows at heathen temples); “metod hīe ne cūpon, / . . . ne wiston hīe drihten God,” 180–1; they did not know the Measurer; they did not understand God, the Ruler). Somewhat less explicit but nevertheless quite possible, the dragon and Grendel, appear to be informed by the biblical Leviathan and Behemoth. In the Bible, Leviathan is a female sea monster and fire-spitting serpent/dragon that is said to be invulnerable to swords and other human weapons (Isaiah 27:1; Job 41:19–21, 25–27, 33–34). Leviathan’s companion, Behemoth, is a male, land-dwelling creature – a giant of massive size that hides, very much like *Beowulf*’s Grendel, in the shadows of a swamp and wooded wilderness: “under the lotus plant it lies, / hidden among the reeds in the marsh. / The lotuses conceal it in their shadow; the poplars by the stream surround it” (Job 40:21–22).

The specification of the Cain lineage of the Grendels, and their ties to the Nephilim and Gibborim of Genesis 6:4, the violent giants born of the union of “sons of God” and “daughters of humans” and that God tried to exterminate through the Flood, are key signs of biblical influences.²⁴ Grendel and his mother are specifically said to be giants connected to their biblical counterparts, whose enmity with God is alluded to in the description of Grendel (102–14) and also recorded on the rune-inscribed hilt of the sword that Beowulf finds in the Grendels’ hideout (1689–93). Beowulf too is a giant (247–48), with the strength of thirty men

spread of Jewish texts in northern Europe: “German Jewry may have been first introduced to the Merkabah literature by the Kalonymus family, which emigrated from southern Italy to the Rhineland in the ninth century . . . It is possible that the Merkabah texts were first brought to southern Italy by Aaron of Baghdad, who arrived there in the ninth century”: Alexander, “3 (Hebrew Apocalypse of) Enoch,” in Charlesworth, *Pseudepigrapha* (see note 19), 252. The ongoing influence of Mesopotamian nature myths can also be inferred from the pairing, in the *Anglo-Saxon Chronicle*, of thunder and lightning with fiery flying dragons, understood by the writers as omens presaging the coming of the Vikings to England and, in particular, their raid of Lindisfarne island, “bær paeron ormete lig raescas and paeron geseowene fyrene dracan on þam lýfte fleogende” (there were enormous light-rushes [lightning] and fiery dragons were seen flying in the air): *Peterborough Chronicle*, Oxford, Bodleian, MS Laud 636 = MS E, folios 25v–26r. Source: https://codex.vanhamel.nl/Oxford_Bodleian_Library_MS_Laud_636 (last accessed on Sep. 20, 2023).

24 Hebrew בְּנֵי הָאֱלֹהִים *bənē hā’ēlōhīm* (Genesis 6:2; “sons of God” NIV) and בָּנוֹת הָאָדָמָה *bənōwṭ hā’ā-dām* (Genesis 6:2; “daughters of humans” NIV). *Nephilim* נַפְלִיִּם *naṣīlīm* (Strong 5303) is a Hebrew word referring to men of extraordinary strength, giants among men. Literally the word means, “the fallen,” “those who have been cast down” < נָפַל *nāpal* (Strong 5307; to fall, to lie prostrate, to be cast down, to fail). *Gibborim* גִּבּוֹרִים *gibbōrīm* (Strong 1368) is the word translated into English as “heroes,” “mighty men,” and “men of renown.” The root of the word is גָּבַר *gābar* (Strong 1396), a verb denoting not just physical strength but boastful insolence and pride.

(379–80), just as Grendel kills thirty men in his visits to Heorot Hall (123). As Beowulf himself notes, he and Grendel are equally matched (677–78). The passages naming and describing Grendel clearly and explicitly establish the Cain and giant lineage of the monsters in the epic:

wæs se grimma gæst Grendel hāten,
 mære mearcstapa, sē þe mōras hēold,
 fen ond fæsten; fifelcynnes eard
 wonsæli wer weardode hwile,
 siþðan him scyppen forscifen hæfde
 in Cāines cynne – Þone cwealm gewræc
 ēce drihten, þæs þe hē Ābel slōg;
 ne gefeah hē þære fæhðe, ac hē hine feor forwræc,
 metod for þý mæne mancynne fram.
 Þanon untýdras ealle onwōcon,
 eotenas ond ylfe ond orcneas,
 swylce ġī(ga)ntas, þā wið Gode wunnon
 lange þrāge; hē him ðæs lēan forġeald. (102–14)

[The grim spirit was named Grendel, mighty stalker of the mark/border, who held the moors, the safety of the marsh; the unhappy man possessed for a while the ground of evil beings, since the Creator had forsworn him as kin of Cain. The eternal Lord avenged the killing, as he had slain Abel. He [Cain] did not benefit from the conflict, because the Ruler exiled him far away from mankind for that crime. From him issued all evil offspring, enormous eaters and elves and creatures of the deep, the kind of giants that fought against God a long time ago. He paid them the reward.]

Even more explicit in the linking of the Grendel monsters to the biblical giants, the hilt of the sword that Beowulf brings back from his adventure in the Grendels' underwater cave is inscribed, in runic characters, with the story of their destruction in the Flood and the specification that the sword itself was manufactured in the days of the biblical giants, as it is "eald sweord eotenisc" (1558; old sword of gigantic eaters) and "ġīganta geweorc" (1562; the work of giants). Hrothgar receives the sword hilt from Beowulf and examines it, also commenting on its features:

Hrōðgār maðelode; hylt scēawode,
 ealde lāfe. On ðæm wæs ōr writen
 fyrngewinnes; syðþan flōd ofslōh,
 ġifen ġēotende ġīganta cyn,
 frēcne ġefērdon; þæt wæs fremde þēod
 ēcean dryhtne; him þæs endelēan
 þurh wāteres wylm waldend sealde.
 Swā wæs on ðæm scennum scīran goldes
 þurh rūnstafas rihte ġemearcod,

geseted ond gesæd hwām þæt sweord ġeworht,
 irena cyst ærest wære,
 wreopenhilt ond wyrmfāh. . . . (1687–98)

[Hrothgar spoke; he looked at the hilt of the old heirloom. On it was written the origin of the first war, when the flood swept away, in a rushing ocean, the race of the giants. They fared terribly. Those were alien people to the eternal lord; to them the ruler delivered the final payment through the swollen waters. So it was set and said, on shiny plates of gold, through rune-staves clearly marked, by whom that sword had first been made, the best of irons; its hilt fashioned into twisted serpent shapes]

As Robert E. Kaske, Ruth Mellinkoff and others have noted, however, the *Beowulf* poet's sources of the idea of Cain being the originator of a line of monstrous offspring, who, in a mysterious way, are connected to the giants of Genesis 6:4, are biblical but not canonical, instead having pseudepigraphical origins: "the extra-biblical elements appearing in and around the portrayal of the monster pair derive from an ancient Jewish pseudepigraphical tract known as the Book of Enoch, more precisely, I Enoch."²⁵ In Enochic lore, the origins of the corruption of nature go back to seven errant "stars," led by Satan/Satanail (2 *Enoch* 29), that rebelled against God at the beginning of creation and that were cast into a bottomless abyss as a punishment (1 *Enoch* 18).²⁶ In the Slavonic 2 *Enoch*, these stars play the role of "lamps" in the heavens (2 *Enoch* 30:3), as they do in the creation song of the *scop* (poet) in *Beowulf*: "se ælmihtiga . . . / . . . / ġesette siġehrēpiġ || sunnan ond mōnan, / lēoman tō lēohte || landbūendum," (92–95; the Almighty . . . glorious

25 Kaske, "Beowulf and the Book of Enoch" (see note 21), 421–31. Mellinkoff, "Cain's Monstrous Progeny, Part I" (see note 21), 143. Mellinkoff also discussed the points of contact between the cannibal giants in *Beowulf* and their counterparts in 1 *Enoch* and *Jubilees*. She is not in full agreement with the comparison to Behemoth and Leviathan but admits the similarities in terms of the places of habitation of the monsters (150–53). Peltola, "Grendel's Descent from Cain" (see note 21), 284–91. Oliver F. Emerson, "Legends of Cain, Especially in Old and Middle English," *PMLA* 21.4 (1906): 831–929. Karl W. Bouterwek, "Das Beowulflied, eine Vorlesung," *Germania: Vierteljahrsschrift für deutsche Alterthumskunde* 1 (1856): 385–418. Also, more recently, Brandon W. Hawk, "A History of the Study of Apocrypha in Early Medieval England," *Bulletin for the Study of Religion* 48.3–4 (2020): 13–26, <https://doi.org/10.1558/bsor.37171> (last accessed on Dec. 1, 2023).

26 Just as the story of the Flood hearkens back to Mesopotamian sources, the original fallen stars constitute demonized forms of the seven main Mesopotamian deities (Anu, Enlil, Enki/Ea, Ninhursag, Nanna, Innana, and Utu/Shamash), transformed into Greek deities in the Slavonic 2 *Enoch*: кроївъ (Cronos); афридит (Aphrodite); ариш (Ares); сѣце (Sol, the Sun); зеоуш (Zeus); ермиѣ (Hermes); and луна (Luna/the Moon) (2 *Enoch* 30:3). Macaskill, *Slavonic Texts* (see note 19), 120; Black, *Book of Enoch* (see note 19), 35–36; Charlesworth, *Pseudepigrapha* (see note 19), 148.

in victory, placed the sun and moon as a lamp to give light to land-dwellers).²⁷ That story is also the basis of the Anglo-Saxon *Genesis A* and *Genesis B*, as well as the so-called *Saxon Genesis*, which do not follow the canonical Genesis but its Enochic versions, particularly the story of the proud rebel angel – the “engla weard” (22: guardian of the angels, prince of the angels, foremost of the angels) – and his followers – a “werodes prymme” (27; a warrior band) – who attempted to establish a kingdom of their own, rivaling God’s, and whom God consequently confines to a “witehus” (39; house of torment and pain).²⁸

In 2 *Enoch*, after the creation of humans, whom God intended as replacements for the fallen stars/angels, Satan seeks revenge and arranges for the temptation Adam and Eve (29–30). In the medieval rabbinical commentaries connected to those narratives, furthermore, the temptation of Eve is not only dietary but also sexual, involving both miscegenation and bestiality, further adding to the sense that her transgression is also a form of corruption of nature. According to the *Pirkê de Rabbi Eliezer*, the serpent of Eden was the vehicle used by the fallen angel, Samael, to seduce Eve, causing her to become pregnant and giving birth to Cain, as well as a twin sister.²⁹ In the fifth- or sixth-century *Book of the Conflict of Adam and Eve with Satan*, Cain’s sister is named Luluwa (1:54); Âwân in the *Book of Jubilees* (4:1).³⁰ Adding incest to the prior acts of miscegenation and bestiality, Cain marries

27 Both the creation song in *Beowulf* and Caedmon’s *Hymn* seem indebted to the imagery of 2 *Enoch* 30. Caedmon’s *Hymn* in *The Anglo-Saxon Minor Poems*, ed. Elliott Van Kirk Dobbie. The Anglo-Saxon Poetic Records, VI (New York: Columbia University Press; London: Routledge and Kegan Paul, 1942), 106.

28 *Genesis A* and *Genesis B*, in *The Junius Manuscript*, ed. George Philip Krapp. The Anglo-Saxon Poetic Records, I (New York: Columbia University Press, 1931), 3–4, 10–14. A late tenth- or early eleventh-century codex, the Junius manuscript also contains Anglo-Saxon versions of *Exodus* and *Daniel*, and a piece known as *Christ and Satan*. It also features illustrations of Enoch himself standing on the back of a dragon, speaking with angels, and ascending to Heaven (60–61): Barbara Raw, “The Probable Derivation of Most of the Illustrations in Junius II from an Illustrated Old Saxon ‘Genesis,’” *Anglo-Saxon England* 5 (1976): 133–48. Bodleian Library MS. Junius 11; digital facsimile at: <https://digital.bodleian.ox.ac.uk/objects/d5e3a9fc-abaa-4649-ae48-be207ce8da15/> (last accessed on Dec. 1, 2023). Frederick Klaeber, *The Later Genesis and Other Old English and Old Saxon Texts Relating to the Fall of Man* (1913; Heidelberg: Carl Winters Universitätsbuchhandlung, 1931). Alger N. Doane, *The Saxon Genesis: An Edition of the West Saxon Genesis B and the Old Saxon Vatican Genesis* (Madison, WI: University of Wisconsin Press, 1991).

29 *Pirkê de Rabbi Eliezer* (see note 18), ch. XXI, 150–52. Though not claiming problematic paternity, other commentaries mention Cain’s twin sister and also two twins of Abel: “Only two entered the bed, and seven left it: Cain and his twin sister, Abel and his two twin sisters,” *Midrash Rabbah* (see note 18), 1.180.

30 *The Book of Adam and Eve, also called, The Conflict of Adam and Eve with Satan*, trans. Solomon Caesar Malan (London and Edinburgh: Williams and Norgate, 1882), 92. *Pirkê de Rabbi Eliezer* (see note 18), 152 n. 3.

his sister.³¹ Though incest was considered inevitable in the early generations of biblical humans, the *Pirkê* notes the continuation of the incestuous practices in the later generations of Cain and characterizes them as entirely immoral and sinful.³²

The *Pirkê*'s description of the wicked offspring of Cain and his sister has, in fact, extremely strong explanatory value of, and affinities with, the *Beowulf* poet's imagination of the Grendel pair. Most significantly, the *Pirkê* explicitly ties together the matter of the perverse progeny of Cain and the mixing of angels of God and human women that resulted in the birth of the giants:

From Cain arose and were descended all the generations of the wicked, who rebel and sin . . . The generations of Cain went about stark naked, men and women, just like the beasts, and they defiled themselves with all kinds of immorality, a man with his mother or his daughter, or the wife of his brother, or the wife of his neighbour, in public and in the streets, with evil inclination which is in the thought of their heart. . . as it is said, 'And the sons of Elohim saw the daughters of men that they were fair; and they took them wives of all that they chose. . . From them were born the giants (Anakim), who walked with pride in their heart, and who stretched forth their hand to all (kinds of) robbery and violence, and shedding of blood, as it is said, 'And there we saw the Nephilim, the sons of Anak' . . . They bare their sons and increased and multiplied like a great reptile, six children at each birth.³³

These passages account quite well for the bizarre way of life of the Grendel pair, who indeed are kin of Cain and giants – like the Anakim and Nephilim mentioned in the *Pirkê* – behaving in animal-like ways, living in caves, roaming around the wilderness, observing no moral or any other boundaries, also cohabiting – as do the offspring of Cain in the *Pirkê*, “a man with his mother” – and engendering large numbers of monstrous offspring, just as the reptile-like brood of Cain and his sister, in this case the “wyrmas,” “dracan,” “wyrmcynnes fela,” “nicras,” and other monstrous creatures (1425–30) that infest the waters of the mere and which can only be understood as the spawn of the incestuous union of mother and son:

Ġesāwon ðā æfter wætere wyrmcynnes fela,
sellice sædracan, sund cunnian,
swylce on næshleoðum nicras licgean,
ðā on undernmæl oft bewitiġað

31 “Rabbi Miasha said: ‘Cain was born, and his wife, his twin sister, with him’”: *Pirkê de Rabbi Eliezer* (see note 18), 152.

32 In the *Pirkê de Rabbi Eliezer*, the question of the permissibility of incestuous unions is debated by Rabbi Miasha and Rabbi Simeon, the latter invoking Leviticus 20:17: *Pirkê de Rabbi Eliezer* (see note 18), 152.

33 *Pirkê de Rabbi Eliezer* (see note 18), Ch. XXII, 158–61. Mellinkoff discusses similar passages in Eusebius's *Church History*: “Cain's Monstrous Progeny, Part I” (see note 21), 148.

sorhfulne sīð on seġlrāde,
 wyrmas ond wildēor . . . (1425–30)

[They saw then, on the water, many kinds of serpents; strange sea-dragons testing the waves; water-monsters lying on the embankments, such as serpents and wild beasts do on mornings when they look on the painful path of the sail-road]

As it is often mentioned in discussions of *Beowulf*, the mere and the cave that lies deep under its waters is doubtless a sort of hell and also a womb from which monstrous creatures issue. The waters of the mere, furthermore, are tainted with blood, “drēoriġ ond ġedrēfed” (1417), and are also said to be boiling – “Flōd blōde wēol . . . / hātan heolfre” (1422–23; the flood boiled with blood and hot gore; also 845–9). These images can be related to the corruption of nature that accompanies the corruption of humans who are beast-like. The underwater cave and the detail of boiling waters also reinforce the ties of *Beowulf* to the concerns of the *Pirkê*, as the latter explains that when some of the giants initially survived the Flood due to their huge size, God caused the waters to boil, though apparently underwater caves, such as the Grendels’ abode, sheltered their dwellers.³⁴

Both *Beowulf* and the *Pirkê* connect the kin of Cain to the giants born of fallen angels, a story of yet further corruption of nature taking place, according to *1 Enoch*, in the seventh generation of humans. That is the generation of Enoch, a descendant of Seth, and of Lamech, a descendant of Cain, when a new group of fallen angels, called Watchers or Egregori, descend to earth, led by Šemḥazah/Semhazah

³⁴ Peltola comments on the *Zohar*’s account of the survival of Cain’s descendants in underground shelters: “Grendel’s Descent from Cain” (see note 21), 286. The *Pirkê* mentions Og, the king of Bashan, as a giant and survivor of the Flood (Ch. XXIII): *Pirkê de Rabbi Eliezer* (see note 18), 167. In Deuteronomy 3:11, Og is said to be the last of the רפאים *Rephaim* (Strong 7497; giants). The sixth-century listing of acceptable and forbidden books known as the *Decretum Gelasianum* includes a reference to a *Liber de Ogia nomine gigante qui post diluvium cum dracone ab hereticis pugnassee perhibetur* and which the Decretum declares *apocryphus*: *Das Decretum Gelasianum de libris recipiendis et non recipiendis*, ed. Ernst von Dobschütz (Leipzig: J. C. Hinrichs, 1912), 54. The title of the book, as rendered in the *Decretum*, seems corrupt but, with the help of manuscript variants noted by Dobschütz, it is possible to translate it as: “Book about Ogias, the name of a man of the giants, who is believed to have fought with a dragon after the Flood” (*ab hereticis* should likely be *haberet* and *nomine gigante* = *nomen homine gigantum*). The *post* (after) could also be *ante* (before), depending on whether the fight with the dragon occurred before or after the Flood. “This *Ogias* has been identified with *Og of Bashan*, who according to late sources lived five thousand years and managed to survive the Deluge, thanks to his giant size”: Walter Bruno Henning, “The Book of the Giants,” *Bulletin of the School of Oriental and African Studies* (University of London) 11.1 (1943): 52–74; here 54. “Thanks to a Parthian fragment, we know the name of this dragon: . . . Leviathan . . .”: Milik, *Books of Enoch* (see note 19), 299.

(1 *Enoch* 6:1–6).³⁵ Mating with human women, these Watchers engender the giants, who proceed to kill and devour whatever they can find, including people:

great giants of three thousand cubits; . . . These devoured the entire fruits of men's labour, and men were unable to sustain them. Then the giants treated them violently and began to slay mankind. They began to do violence to and to attack all the birds and the beasts of the earth and reptiles [that crawl upon the earth], and the fish of the sea; and they began to devour their flesh, and they were drinking the blood. (1 *Enoch* 7:2–5)

Like the *Pirkē's* description of the behavior of the kin of Cain, these passages of 1 *Enoch* offer a similarly valuable account of the conduct of the Grendel pair relative to the helpless Danes, who have no choice but to see their livelihood undermined by the monsters, who, literally, devour them and drink their blood. This is made explicit in the description of Grendel's eating of the Geat warrior, Hondscoioh:

Nē þæt se āglæca yldan þōhte,
ac hē ġefēng hraðe forman sīðe
slæpendne rinč, slāt unwearnum,
bāt bānlocan, blōd ēdrum dranc,
synsnædum swealh; sōna hæfde
unlyfigendes eal ġefeormod,
fēt ond folma. . . (739–45)

[The monster did not intend to wait and, first of all, quickly grabbed a sleeping warrior, slaying him unawares, bit into his bone joints, drank the blood from his veins, swallowed him in large pieces and, soon, he had consumed the entire corpse, feet and hands]

35 Black, *Book of Enoch* (see note 19), 27–28. Aramaic text in Milik, *Books of Enoch* (see note 19), 165–68. Greek fragments of 1 *Enoch*, preserved in the ninth-century *Chronographiae* of the Byzantine scholar George Syncellus and other sources, refer to guardian/watcher angels, as “οἱ ἐγρηγόροι”: *Georgius Syncellus et Nicephorus Constantinopoleos*, ed. Karl Wilhelm Dindorf. *Corpus Scriptorum Historiae Byzantinae*, 1 (Bonn: Weber, 1829), 20. ἐγρηγόροι (egregoroi) < ἐγρηγορώω (watching, awake), epic form of present participle of ἐγρηγοράω = ἐγείρωμαι middle/passive form of the verb, ἐγείρω (egeirō): to awaken, to rouse: Liddell and Scott, *Greek Lexicon* (see note 10). Although the language of 2 *Enoch* is Slavonic, the Greek form of its source, Γρηγορίη (18:1; Grigori) is retained: Macaskill, *Slavonic Texts of 2 Enoch* (see note 19), 86. In the Ethiopic/Gəʿəz texts the corresponding expressions are ተገዥን *teguhān* (1 *Enoch* 1:5; watchers, guardians) and ልጆች ሰማያት *waluye sāmayaṭ* (6:2; children of heaven): Wolf Leslau, *Comparative Dictionary of Geʿez (Classical Ethiopic)* (Wiesbaden: Otto Harrassowitz, 1987); August Dillmann, *Lexicon Linguae Aethiopicae* (Leipzig: T. O. Weigel, 1865). The Aramaic Targum Onkelos translates the expressions in Genesis 6:2 as בְּנֵי רַבְרְבִּיָּא *beni rabrbia* (sons of the rulers) and בְּנוֹת עֲנוֹשׁ *benit enoshe* (daughters of man; or daughters of Enosh, the son of Seth, grandson of Adam and Eve): *Sefaria* (Online Library of Jewish Texts), <https://www.sefaria.org/> (last accessed on Sep. 10, 2023). Cf. Hebrew עֲנוֹשׁ *enos* (Strong 583; man, also a proper name of one of the sons of Seth), a word derived from the root, עָנָשׁ *ʾanaš* (Strong 605; sick, incurable, weak).

Unnatural Sex: Miscegenation, Bestiality, and Incest

Pseudepigraphical narratives also shed light on the vexed question of whether perverse sexuality is an issue in *Beowulf*. The epic makes plenty clear that Grendel is a monster and an unnatural creature because he is “Cāines cynne” (l. 107; kin of Cain; also 1261-6). Pseudepigraphical sources also make clear that Cain married his own sister, Âwân/Luluwa (*Jubilees* 4:1, 9; *Book of the Conflict of Adam and Eve with Satan* 1.54) and that their offspring are evil and engage in sexual immorality, including incest. And since Cain himself is said to be the offspring of the mating of Eve with the demon-serpent Sammael, he would have been already the result of a sexual perversion and also the first of the “giants,” i.e. a monster born of the union between a human woman and a fallen angel, as in the later case of the Nephilim and Gibborim.

In light of the pseudepigraphical evidence, the Grendel monsters can be seen to be giants in the sense of their being a result of a long history of sexual aberrations including miscegenation, bestiality, and also incest. Sexual perversions are central to the concerns of texts like *1 Enoch*, which makes use of bull and cows as metaphors to represent the unions of angelic beings and human women, as well as their results in the form of other animal species. Such imagery is intended to stress the debasement of the angelic nature, also that of humanity, as angels and humans defile themselves by engaging in sexual activities which amount to miscegenation and bestiality. Indeed, in *1 Enoch*, the Watchers are explicitly said to be stars that fall to earth and are transformed into bulls that copulate with cows that represent human females. In *1 Enoch*’s zoomorphic symbolism, the union of the angels of God with the daughters of humans results in the birth of “elephants, camels, and asses,” which are seen as aberrations of nature and represent the giants, after whose birth, all manner of evil breaks out on earth. This account is given by Enoch in the course of informing his son, Methuselah, about his dream visions:

And again I saw with my eyes as I slept, and I saw the heaven above, and behold a single star fall from heaven, and it became transformed (into a bull), and it fed and pastured among those oxen. And after this I saw the large and black oxen, and behold, they all destroyed their stalls and their pastures and their calves, and they began to butt one another. And again I saw in the vision, and looked towards the heavens, and behold I saw many stars descend and cast themselves down from heaven beside that first star, and like it they became bulls amongst those cattle, and with them pastured among them. And I looked at them and saw, and behold they all let out their members, like horses, and began to mount the cows of the oxen; and they all became pregnant and bore elephants, camels and asses. And all the oxen feared them and were affrighted at them, and began to bite with their

teeth and to devour and to gore with their horns. And they began to devour these oxen; and behold all the children of the earth began to tremble and quake before them and to flee. (*1 Enoch* 86:1–6).³⁶

Enoch continues his narrative by noting the intervention of four heavenly beings, “who were like white men,” and who tell Enoch: “Remain here till you see everything that befalls those elephants, camels, and asses, and the stars and all the oxen” (87:2, 4):

And I saw one of those [heavenly beings] who had come forth first, and he seized that first star that had fallen from the heavens, and bound it hand and foot and cast it into an abyss: now that abyss was narrow and deep, and closed in and dark. And one of them drew a sword, and gave it to those elephants and camels and asses: they began to smite one another, and the whole earth quaked because of them. And as I was looking in the vision, behold, then, one of those four who had come forth stoned them from heaven, and he gathered and took all the many stars whose privy members were like those of horses, and bound them all hand and foot, and cast them in an abyss of the earth. (*1 Enoch*: 88:1–3)³⁷

Those events are then followed by a narrative of the Great Flood, where Noah is a bull who is visited by one of the archangels of God and is transformed into a man, who then builds the ark. Still using animal imagery, the story goes on to tell of the end of the Flood and the proliferation of the progeny of the sons of Noah, who are characterized as three bulls of different colors, white, black, and red. That story is, sadly, about the renewal of bestiality and evil, in postdiluvial times, resulting in the coming into being of multiple species of predators and aggressive creatures that terrorize the gentler animals, like the sheep³⁸:

³⁶ Black, *Book of Enoch* (see note 19), 73; emphasis removed.

³⁷ Black, *Book of Enoch* (see note 19), 74.

³⁸ “The later generations would not learn from the earlier ones, i.e., the generation of the Flood from that of Enosh, and the generation of the Separation [of tongues] from that of the Flood”: *Midrash Rabbah* (see note 18), 1: 218, 304. John C. Reeves, “Utnapishtim in the Book of Giants?” *Journal of Biblical Literature* 112 (1993): 110–15, explores “a tradition which alleged that the Flood-hero was a ‘Giant’” (110), suggesting Noah himself was a giant and the reason why his offspring quickly turn to evil deeds. Midrashic traditions suggest the misdeeds were already occurring, among humans and animals, prior to the landing of the Ark and the disembarking of its occupants. “the Aggadic homilies attributed two major sins to Noah’s generation – sexual corruption (prostitution, adultery, and zoophilia) and social-moral corruption, i.e., stealing”; those sources indicate that sexual intercourse was banned during the Ark’s voyage but that three creatures disobeyed the prohibition, Noah’s son, Ham, a dog, and a raven, which is noted as the reason why Ham’s skin turns black and begets Kush, also of dark skin: Abraham Ofir Shemesh, “Tensions, Struggles and Forbidden Sexual Relations in Noah’s Ark: The Narrative of the ‘Uncalm Ark’ in the Aggadic Homilies,” *Estudos de Religião* 35.3 (2021): 241–55; here 242–44.

And they [the sons of Noah] began to beget beasts of the field and birds, so that there arose from them every variety of species: lions, leopards, wolves, dogs, hyenas, wild-boars, foxes, rock-badgers, swine, wild ostriches, vultures, kites, eagles and ravens; . . . And they began to bite one another; . . . And the wolves began to terrify them [the sheep], and they oppressed them until they had destroyed their little ones, and they cast their young into a river of deep water: but those sheep began to cry aloud on account of their little ones, and to complain to their Lord (1 *Enoch* 89:11–15).³⁹

Scandinavian texts, which no doubt are also indebted to biblical and pseudographical sources, are similarly useful in the elucidation of the sexual subtexts of *Beowulf*. It is clear, from the perspective of those texts, that Hrothgar's family is entangled in incestuous practices.⁴⁰ This would have been well-known to the *Beowulf*

³⁹ Black, *Book of Enoch* (see note 19), 75.

⁴⁰ Though many scholars have been slow to come to terms with the sexuality of *Beowulf*, opportunists pandering to popular tastes have been apparently much more perceptive, exploiting the story's undercurrents of sexual aberrations in a variety of films. The most notable is the cinematic monstrosity, *Beowulf* (2007), dir. Robert Zemeckis, starring Ray Winstone, Anthony Hopkins, John Malkovich, and Angelina Jolie. The writers of that film, Neil Gaiman and Roger Avary, glibly claimed, in Avary's words, that, "[t]he script for *Beowulf* was written quickly, under a palapa in a Mexican quinta I obtained for the writing process, knocking out a first draft in just under two weeks. However, the process of getting the film made took Neil Gaiman and I [sic] ten years together, and for me a total of twenty-five years from gestation to completion": *Beowulf: The Script Book* (New York: Harper Entertainment, 2007), 3. An alert scholar of popular culture, however, noted the idea of Grendel's paternity was taken from Graham Baker's science fiction film, *Beowulf* (1999), written by Mark Leahy and David Chappe: Kathleen Forni, "Popularizing High Culture: Zemeckis's 'Beowulf,'" *Studies in Popular Culture*, 31.2 (2009): 45–59; here 49. It was scholarship however – particularly Fajardo-Acosta, *Condemnation of Heroism* (1989; see note 21) – that provided the ideas for both films. Grudgingly admitting unacknowledged debts, apologists for Gaiman and Avary have claimed that they are "well-read." Thomas Ballhausen, for example, sees the filmic appropriations of scholars' interpretations as acts of "import/export" and "lyrical translations or even modern retellings": "Global *Beowulf*: On Strange Ecologies and the Import/Export of Monsters," 2022 International Symposium on Medieval and Early Modern Studies: Pre-Modern Globalism, University of Arizona, Tucson, Arizona, May 1, 2022 (this was, unfortunately, not rendered into a published piece). The excellent study of Robert E. Bjork, "The Reception History of *Beowulf*," *SELIM. Journal of the Spanish Society for Medieval English Language and Literature* 25.1(2020): 1–19; here 13–14 makes clear the scholarly lineage of the identification of sexual elements in *Beowulf*. The ideas of the dragon as offspring of Grendel's mother and her shame-ridden encounter with Beowulf in the cave are explicit in, for example, Nora K. Chadwick, "The Monsters and Beowulf," *The Anglo-Saxons: Studies in Some Aspects of their History and Culture Presented to Bruce Dickins*, ed. Peter Clemoes (London: Bowes & Bowes, 1959), 171–205; here 182; Lewis E. Nicholson, "Hunlaving and the Point of the Sword," *Anglo-Saxon Poetry: Essays in Appreciation for John C. McGalliard* (Notre Dame, IN: University of Notre Dame Press, 1975), 50–61; here 57–58; Alvin A. Lee, *The Guest-Hall of Eden: Four Essays on the Design of Old English Poetry* (New Haven, CT: Yale University Press, 1972), 215, 218–9.

poet's contemporaries, to whom the exploits of the Danish heroes-of-old were as familiar as those of the characters in the biblical stories, in fact the latter quite clearly having informed the Scandinavian and Anglo-Saxon tales. Saxo Grammaticus's *Gesta Danorum*, *Hrólfs Saga Kraka*, and the *Ynglingasaga* all coincide in naming Helgi/Hálga, son of Healfdene and brother of Hrothgar, as the perpetrator of incest, with his own daughter, Yrsa (Ursa, i.e., the she-bear, a figurative act of bestiality as well), resulting in the begetting of Hrolf/Hröðulf, who is destined to turn against his own kin, Hrothgar's sons in particular, and practice *fācenstafas* (l. 1018; hostile-runes, i.e., sorcery), which is another one of the evil arts that humans learned from the Watchers, according to *1 Enoch* 7:1.⁴¹ *Fācenstafas* is generally rendered as "treachery" or "malice" but it is a word with specific connotations of the kind of evil magic also practiced by Óðin, who is a shape-shifter and was said to be able to project his spirit, in beast form, anywhere he wanted, while his body lay inert (*Ynglingasaga* 6–7). This is also the skill of Bothvar Bjarki, Hrolf's champion, who appears in battle as a monstrous bear ("björn einn mikill"; *Hrólfs Saga Kraka* 33), while his body lies sleeping somewhere else.⁴² In Saxo's account, Bothvar Bjarki and his sidekick, Hjalte, kill a gigantic bear and Hjalte drinks its blood to acquire its strength (*Gesta Danorum* II, 56). The shadow self of characters like Hrolf/Hröðulf and berserker/"bear-shirted" warriors like Bothvar Bjarki, Grendel exposes the bes-

41 Saxo Grammaticus, *Saxonis Grammatici Gesta Danorum*, ed. Alfred Holder (Strassburg: Karl J. Trübner, 1886). *Hrólfs Saga Kraka og Bjarkarímur*, ed. Finnur Jónsson (Copenhagen: S. I. Møllers, 1904). Snorri Sturluson, *Ynglinga Saga*, in *Heimskringla: History of the Kings of Norway*, trans. Lee M. Hollander (Austin, TX: American Scandinavian Foundation/University of Texas Press, 1992), 6–50. Other narratives with notable parallels include the *Volsunga saga* which involves the incestuous relationship of the twins Sigmundur (Sigemund in *Beowulf*) and Signý, and their son Sinfrjóti (Fitela): see commentary on ll. 875–900 in *Klaeber's Beowulf* (see note 15), 166–167; *Fornaldarsögur Norðurlanda*, ed. Guðni Jónsson and Bjarni Vilhjálmsson (Reykjavík: Bókautgáfan Forni, 1943); and the lost *Skjoldunga saga*, *Danakonunga sogur*. *Skjoldunga saga*, *Knytlunga saga*, *Agrip af sögu Danakonunga*, ed. Bjarni Gudnason. Islenzk Fornrit 35 (Reykjavík: Hið Islenzka Fornritafelag, 1982). Chadwick, "Monsters and Beowulf" (see note 40), 171–205. Helen Damico, *Beowulf's Wealththeow and the Valkyrie Tradition* (Madison, WI: University of Wisconsin Press, 1984), 113; Fajardo-Acosta, *Condemnation of Heroism* (see note 21), 56–62. Marijane Osborn, "Legends of Lejre, Home of Kings," *Beowulf and Lejre*, ed. John D. Niles and Marijane Osborn. Medieval and Renaissance Texts and Studies [MRTS], 323 (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies [ACMRS], 2007), 235–53. Biarki (Bödvar Bjarki) is a well-recognized analogue of Beowulf: Chadwick, "Monsters and Beowulf" (see note 40), 179. His companion Hjalte corresponds to Beowulf's loyal retainer, Wiglaf (l. 2602). Wiglaf's speeches encouraging Beowulf's followers to help their king in his battle with the dragon are close parallels of Hjalte's similar exhortations to Rolf's retainers to come to his aid. Recent scholarship continues to support the idea of strong parallels between *Beowulf* and Scandinavian folklore: Zhu, "Beowulf and Ragnarök" (see note 21), 53–67.

42 Snorri, *Ynglingasaga* VII, in *Heimskringla* (see note 41), 10–11. *Hrólfs Saga Kraka* (see note 41), 100.

tial character of the Danes themselves – their fratricidal violence, their incestuous and otherwise perverse sexual practices, also their drunken brutality, and their worship of pagan idols.⁴³

Unnatural Arts: Swords, Treasures, Magic, Seduction and Deception

Also of direct relevance to *Beowulf*, *1 Enoch* specifies that the giants' violence and the chaos they cause in human society are worsened by evil arts, including the making of swords, sorcery, divination, and methods of seduction and deception, taught to humans by the Watchers, of whom Azazel/Asael is the most prominent because he teaches the arts of manufacturing iron weapons and gold and silver jewelry, the two forms of treasure that were most prized by ancient people and that were the main cause of conflicts, also of their destructiveness:

Asael taught men to make swords of iron and breast-plates of bronze and every weapon for war; and he showed them the metals of the earth, how to work gold, to fashion (adornments) and about silver, to make bracelets for women; and he instructed them about antimony, and eye-shadow, and all manner of precious stones and about dyes and varieties of adornments; and the children of men fashioned them for themselves and for their daugh-

43 In Indo-European, and specifically Germanic and Celtic, but also Indo-Aryan, sexual perversity is inescapable in the mythologies and legends, and also in the historical practices, of those peoples. Some of the best-known accounts include the narrative of Aḥmad ibn Faḍlān's visit to the Volga Vikings, the Rūs (red-haired, ruddy-complexioned people), among whom a chief's funeral is not complete without the gang rape, strangulation and stabbing of a slave girl who can accompany the noble lord on his fiery ship journey to the eternal mead halls in paradise: *Ibn Faḍlān and the Land of Darkness*, ed., trans. Paul Lunde and Caroline Stone (London and New York: Penguin, 2012), 50–53. No less gruesome is the late twelfth-century narrative of Gerald of Wales (Giraldus Cambrensis), *Topographia Hibernica*, where he tells us, in Chapter 25, about a northern Irish pagan ritual connected to the transfer of kingship and which featured the new chief's copulation with a mare which was then sacrificed, boiled and eaten by the candidate and his followers: *Giraldi Cambrensis Opera*, ed. James F. Dimock. 8 vols. (London: Longmans, Green, Reader, and Dyer, 1861–1891), Vol. 5 (1867), *Topographia Hibernica et Expugnatio Hibernica*, III.25, 169. Óðin's horse no less, the eight-legged Sleipnir, is the offspring of the bestial intercourse of Loki and the stallion, Svaðilfari (*Gylfaginning* 42); Loki and the giantess, Ángroða, in turn, are the parents of the wolf Fenrir, the serpent Jörmungandr, and Hel herself (*Gylfaginning* 34); Snorri Sturluson, *Edda: Prologue and Gylfaginning*, ed. Anthony Faulkes. Second Edition (London: Viking Society for Northern Research, 2005). Further references in Calvert Watkins, "The Ásvamedha or Horse Sacrifice: An Indo-European Liturgical Form," Ch. 25 in *How to Kill a Dragon: Aspects of Indo-European Poetics* (Oxford and New York: Oxford University Press, 1995), 265–76.

ters and transgressed; and there arose much impiety on the earth and they committed fornication and went astray and corrupted their ways. Semhazah taught spell-binding and the cutting of roots, Hermoni [cf. Hermes] taught the loosing of spells, magic, sorcery and sophistry. Baraqel taught the auguries of the lightning; Kokabiel taught the auguries of the stars; Zikiel taught the auguries of fire-balls; Arteqif taught the auguries of earth; Simsel taught the auguries of the sun; Sahrel taught the auguries of the moon. And they all began to reveal secrets to their wives. Then the giants began to devour the flesh of men, and mankind began to become few upon the earth; and as men perished from the earth, their voice went up to heaven: "Bring our cause before the Most High, and our destruction before the glory of the Great One." (1 *Enoch* 8:1–4)⁴⁴

These passages are of extraordinary importance in the understanding of *Beowulf*, as it is swords and jewelry, rings, armbands, necklaces and other such adornments, said to be products of the evil arts taught to humans by a demon, that are the central concern of medieval Germanic warriors and are also repeatedly characterized, throughout *Beowulf*, as entirely useless and also cursed (e.g., 1522–25, 2277, 2687, 3052, 3069–73, 3168). This issue takes on heightened importance in light of the fact that the sword hilt that Beowulf retrieves from the Grendels' lair is inscribed with the story of the biblical giants and also identifies its maker: "hwām þæt sweord ġeworht, / irena cyst ll ærest wære, / wreoþenhilt ond wyrmfäh. . . ." (1696–98; by whom that sword had first been made, the best of irons; its hilt fashioned into twisted serpent shapes). Truly an ancient heirloom, the vintage weapon bearing the name of its maker is a priceless treasure (or would have been if the blade had not melted after the fight) that goes back to the days when the Watchers taught humans how to make such instruments. Although the actual name of the swordsmith is not explicitly stated, we must suspect this to be the very handiwork of the fallen angel, Azazel, who, after all, was the original swordsmith who taught men how to make implements of war.⁴⁵

The sword that Beowulf uses against the Grendels is indeed a weapon of demonic origin, originally made by a fallen angel and given into the possession of the giants who were the sons of such angels, a blade sure to bring victory in battle, but

44 Kaske observed the similarity of the name "Grendel" and the names of fallen angels in 1 *Enoch*: "*Beowulf* and the Book of Enoch" (see note 21), 426.

45 This sword, in other words, is identified by its manufacturer and hence bears a sort of "brand" not unlike the trademarks of commercial products in the modern global economy, precursors of which were evident in the Middle Ages: Warren Tormey, "Swords as Medieval Icons and Early 'Global Brands,'" *Globalism in the Middle Ages and the Early Modern Age: Innovative Approaches and Perspectives*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 27 (Berlin and Boston: Walter de Gruyter, 2023), 147–88; here 165–66; Albrecht Classen, "Symbolic Significance of the Sword in the Hero's Hand: *Beowulf*, The *Nibelungenlied*, *El Poema de Mio Cid*, the *Volsunga Saga*, and the *Njáls Saga*. Thing Theory from a Medieval Perspective," *Amsterdamer Beiträge zur älteren Germanistik* 80 (2020): 346–70.

also death and destruction to those who wield it. In the present time of Beowulf's adventures among the Danes, the hero, who is himself a giant, uses the sword to kill the pair of Grendel giants. The divine justice that necessitates the destruction of the race of giants is therefore seen operating across time, from the days of the biblical flood and the giants' slaughter, by means of their own weapon, to the days of Beowulf and the Grendel monsters, when the battle continues and fate goes on unfolding, just as scripted on the sword itself.

The use of the giants' own sword to kill them, in a time long after the Flood, is not an innovation of the *Beowulf* poet but a very explicit reference to the *Enoch* traditions where, in addition to the Flood, God sends a sword into their midst so that they can use it killing one another. *1 Enoch* specifies the coming of the Great Flood as punishment for the misdeeds of the giants and tells of the archangels – Uriel, Raphael, Gabriel, and Michael – binding the fallen angels and imprisoning them in darkness under the earth, until the end of the world, after seventy generations, when they will be cast into the fire. Gabriel's task, in particular, is to send the giants "one against the other that they may destroy each other in battle" (*1 Enoch* 10:9). For that purpose, a sword is given to the giants, "[so that] then they began to smite each other, and the whole earth quaked because of them" (*1 Enoch* 88:2). Derived from the *Enoch* narratives, the *Book of Jubilees* describes the destruction of the earth by the Great Flood but further tells of the sword that God sends to the giants, "that each should slay his neighbour, and they began to slay each other till they all fell by the sword and were destroyed from the earth" (*Jubilees* 5:9). The sword is the instrument of their destruction because it was the instrument of their crimes, as noted in *Jubilees*: "with the instrument with which a man kills his neighbour with the same shall he be killed" (*Jubilees* 4:32), an idea shared by the writers of the New Testament: "for all who draw the sword will die by the sword" (Matthew 26:52).

Much like the Mesopotamian Tablet of Destinies recovered by the Sumerian hero Ninurta from his battle with the demonic Anzu, and by the Babylonian Marduk from the watery chaos monster, Tiamat⁴⁶ – as well as the Torah, which the rabbinical tradition believed to have been scripted before the creation of the world⁴⁷ – the inscription on the sword hilt tells of fate and destiny, in this case that of the giants. As it is explicitly etched into the hilt, the sword itself is the alpha and the omega of evil, the "ör . . . fyrngewiness" (1688–89; the origin of the first war), the ur-weapon of mass slaughter, and also its own solution, as those who wield the demonic instrument also destroy themselves with it, even long

⁴⁶ Dalley, *Myths from Mesopotamia* (see note 2), 218, 238, 254.

⁴⁷ *Midrash Rabbah* (see note 18), 1: 6.

after the Flood.⁴⁸ Pushing that idea to the limit, the epic depicts the sword as itself also going out of existence, as its blade melts down after being used to decapitate the Grendel pair (1605–08, 1615–16) – an image hinting at a future time when all evil will disappear and when people “. . . will beat their swords into plowshares and their spears into pruning hooks. Nation will not take up sword against nation, nor will they train for war anymore” (Isaiah 2:4 NIV).

Curse of Cain, Curse of Beowulf

In light of the profound relevance to *Beowulf* of the biblical and pseudepigraphical stories of Cain and the giants, it becomes necessary to investigate the character of Beowulf himself from the standpoint of his also being a giant and his killing of the kin of Cain. Most obviously, the pseudepigraphical idea that God intended for the giants to kill one another with a sword delivered to them expressly for that purpose, plus the fact that the sword Beowulf finds in the cave is precisely a weapon that once belonged to the giants and that tells the story of their destruction, also likely the handiwork of the demon Azazel, all point to the ongoing process of the giants' self-destruction in postdiluvial times, a process in which Beowulf, himself a giant, fully participates. The idea, repeatedly stated in the epic, that Beowulf's swords betray and fail him in his time of need – “*geswāc æt sæcce || sweord Bio-wulfes, / . . . Him þæt gifeðe ne wæs / þæt him irenna || ecge mihton / helpan æt hilde*” (2681–4; Beowulf's sword failed in the struggle; it was not granted that iron edges could help him in battle) – is consistent with the theme of weapons constituting the evil instruments by which the evil destroy themselves. Such a process ends in the epic, not surprisingly, with Beowulf using a sword to kill the dragon and the dragon killing Beowulf by biting him in the neck and injecting him with poison. The logic of Genesis 4:15, furthermore, which states that “anyone who kills Cain will suffer vengeance seven times over,” is in itself a cause for concern regarding the deeds of the hero. God's decision to send the Flood, and also a sword, to destroy the giants and all violent humans, seems similarly germane. Indeed, when placed in its proper biblical and pseudepigraphical contexts, *Beowulf* is a work suggesting that the hero, driven by a desire for gold and glory, which he obtains by murder

⁴⁸ The legends associated with King Arthur's sword appear to be influenced by the same *Enoch* traditions, if not by *Beowulf* itself. In Sir Thomas Malory's account, the sword is held by a hand that emerges from a lake and is delivered to Arthur by a “Lady of the Lake.” The sword must then be returned to the lake after Arthur and his son Mordred have slain each other: *Le Morte d'Arthur* (New York: Modern Library, 1999), I.xxv, XXI.v, 44–46, 922–24.

and plunder, is himself subject to the consequences of the curse of Cain and is also one of the giants whom God planned to exterminate, first through the flood, and later by the sword and the fire.

Though incorrectly perceived by most readers of the epic as admirable actions, the battles of the hero with the monsters are the cause of his own undoing and also that of his people. The killing of Grendel's mother and the decapitation of Grendel with the giants' sword are the specific acts that trigger the tragedy, causing the curse of Cain to fall on Beowulf's head. The curse embodied in the mark of Cain is clear: "anyone who kills Cain will suffer vengeance seven times over" (Genesis 4:15, NIV). Beowulf's story (also Hamlet's) follows that logic very strictly.⁴⁹ By killing Grendel and his mother, who are "Cāines cynne" (l. 107; kin of Cain), Beowulf makes himself subject to a sevenfold punishment of sorts, dictated by the Cainite identity of the victims.

Medieval rabbinical commentaries elaborated on the question of the significance of the curse attendant to the mark of Cain. In those commentaries, the killer of Cain is said to have been one of his own kin, specifically Lamech, the descendant of Cain in the seventh generation of humans, who boasted of killing a man and claimed that "if Cain is avenged seven times, / then Lamech seventy-seven times" (Genesis 4:24 NIV). Lamech of course was fooling himself into thinking that the mark of Cain could be understood as a form of protection and guarantee of vengeance against someone harming him. Accordingly, later in his life, Lamech is described as being blind, a key detail speaking of his lack of understanding of what he had done and what he was yet to do. Although blind, Lamech still goes out hunting, with the help of one of his young sons, and accidentally kills, not only Cain (shockingly still alive in the seventh generation!), but his own son as well. The exegetical work known as the *Midrash Tanhuma Yelammedenu* tells that story:

How was Cain slain? For one hundred and thirty years, Cain became an angel of death, wandering and roaming about, accursed. Lamech, his descendant in the seventh generation, who was blind, would go hunting led about by his young son. At the sight of game, the lad would apprise his father of its whereabouts. One time the lad said to his father: "I see some kind of beast in the distance." Lamech sent his arrow in that direction, and Cain was slain. . . . In his

⁴⁹ In the case of Hamlet, the young prince is tempted by the ghost to undertake revenge by killing Claudius, the Cain-like killer of his own brother. The sevenfold punishment that falls on Hamlet for murdering Claudius is clear: the lives of Ophelia, Gertrude, Laertes, Polonius, Rosencrantz, Guildenstern, and his own. As an absolute tragedy, the ending of the play is a figurative apocalypse precipitated by the spiral of violence and revenge, initiated by Cain, and culminating in the Armageddon where the killers will kill each other, to the last man.

grief, he clasped his hands together, and accidentally struck the child's head, killing him. (Bereshit 11:2)⁵⁰

The significance of the mark/curse of Cain becomes apparent at the moment when Lamech kills Cain and becomes subject to the sevenfold punishment, which takes the form of Lamech's own son dying exactly at that moment, also marking the end of the line of Cain, on the male side at least, as no such descendants of Cain are mentioned any longer in the Bible. From that point on then the kin of Cain continue to exist, but only in the offspring of female descendants of Cain, the "daughters of men," who consort with fallen angels and further corrupt humans. Given that situation, Lamech's blindness and his activities as a hunter can further be understood as symbolic representations of his obtuseness in not realizing, when he still could see, that any killing, of a human being or an animal, has extremely serious consequences that are multiplied many times over, with each additional killing, in the form of generations of humans without hope of redemption, doomed to eventual extermination in the last judgment predicted in the biblical texts.⁵¹

50 *Midrash Tanhuma-Yelammedenu*, trans. Samuel A. Berman (Hoboken, NJ: KTAV Publishing House, 1996), 32. The story is also told in the *Book of Jasher* 2:26–31, where the son of Lamech is identified as Tubal Cain.; ספר הישר [*Sefer Hayasher*] or *The Book of Jasher* [anonymous translator] (1840; Salt Lake City: J. H. Parry, 1887), 5. Tubal-Cain is furthermore characterized, in Genesis 4:22, as a worker in metals like bronze and iron. Rabbinical opinions specify he is a manufacturer of weapons and other sharp instruments and that therefore, "This man perfected (*tibbel*) Cain's sin" (XXIII.3): *Midrash Rabbah* (see note 18), 1: 194. Interestingly, this would be consistent with the notion that the demon, Azazel, taught humans the making of swords, as Azazel was said to have been active on earth in the seventh generation, and can be understood as having taught his swordsmithing craft to humans of the eighth generation, like Tubal-Cain, who already was a kin of Cain and of giant pedigree, if indeed Cain was a son of the fallen angel, Sammael. Peltola, "Grendel's Descent from Cain" (see note 21), 290–1, proposed Tubal-Cain as the possible maker of the giants' sword.

51 The criticism of hunting in the Bible is embodied in the figure of Nimrod, "a mighty hunter before the Lord" (Genesis 10:9 NIV), who is a postdiluvial manifestation of the giants and said to be a גִּבּוֹר *gibbor* (Genesis 10:8; Strong 1368: a hero, strongman, giant), i.e., one of the *Gibborim* ("the heroes of old, men of renown" in Gen. 6:4). He is also literally described, in the Septuagint, as a giant: "Νεβρώδ . . . γίγας" (Gen. 10:8 Sept.). Nimrod is furthermore, not just a mighty man and giant but an enemy of God, as suggested by Augustine who calls him, "uenator contra Dominum" (*City of God* 16.4; hunter against God): Sanctus Aurelius Augustinus Episcopus, *De Civitate Dei*, ed. Emanuel Hoffmann. 2 vols. Corpus Scriptorum Ecclesiasticorum Latinorum, 40 (Prague and Vienna: F. Tempsky; Leipzig: G. Freytag), 2.134. That Nimrod was an enemy of God was also believed by first-century figures like Philo of Alexandria, "Περὶ Γίγαντων" (On the Giants) §65–66: *Philo: Volume II*. Loeb Classical Library, 227 (Cambridge, MA: Harvard University Press, 1929), 440–79; and Rabbi Yohanan ben Zakkai, in whose reported teachings, the divine voice refers to Nimrod as, "the wicked, who stirred the whole world to rebellion against Me by his rule" (*Babylonian Talmud*, Chagigah 13a, trans. Isaac Abrahams): Jacob Neusner, *Development of a Legend*:

For Beowulf, the punishment for his killing of the Grendels is the dragon, a demonic antagonist that not only devastates Beowulf's country and kills Beowulf too, but also, by depriving the Geats of his protection, is said to be certain to lead to the Geats' extermination by their enemies, primarily the Swedes (3001), but also Franks and Frisians (2912). The prophecy of the upcoming downfall of the Geats is reported by a messenger, sent by the young Wiglaf to tell the story of the outcome of Beowulf's battle with the dragon, specifying that all of the dragon's treasure will be thrown into the funeral pyre, to burn and be buried along with the hero's corpse (2999–3027). As the poet points out, the messenger's fateful announcements are not lies: "Swā se secg hwata || seggende wæs, lāðra spella; || hē ne lēag fela / wyrda nē worda" (3028–30; so the bold man was the messenger of most terrible news; he did not lie much, in words or forewarnings). Such dire prophecies, together with the images of Beowulf's pyre consuming his body and his weapons, and all of the dragon's treasure, won at the cost of his life but now entirely useless, are unequivocally apocalyptic and are further reinforced by the dirge sang by the Geatish woman who, *völva*-like, tells of upcoming "heregeongas . . . / wælfylla . . . || werudes egesan, / hȳnðo ond hæftnȳd" (3153–55; invasions, slaughters, terrifying armies, humiliation and slavery).

Indeed, as he is told of the dragon's attack against Geatland, Beowulf is aware of the fact that the event is related to a mysterious transgression of his own: "wēnde se wīsa, || þæt hē wealdende / ofer ealde riht, || ēcean Dryhtne / bitre gebulge" (2329–31; the wise man considered that he had bitterly angered the eternal lord, over the old law). The "ealde right" (2330; old law) in this case is that specified in Genesis 4:15: "anyone who kills Cain will suffer vengeance seven times over" (NIV), stated more concisely in Exodus 20:13: "You shall not murder" (NIV). The confirmation of the fact is in the correspondence of the length of the reign of Beowulf over the Geats, "fiftig wintra" (2209; fifty winters), and the length of the dragon, "fiftiges fōtgemearces" (3042; fifty foot-marks, i.e., fifty feet). The number 50 in this case is profoundly significant, as it establishes a correlation between the deeds of Beowulf as a king and the magnitude of a beast representing evil, strongly hinting at an identification of hero and monster, and also suggesting the gold-hoarding dragon contributes to the understanding of the character of Beowulf himself, who, very much like a dragon, has spent his life raiding other peoples, killing, burning

Studies on the Traditions Concerning Yohanan ben Zakkai. Studia Post-Biblica, 16 (Leiden: Brill, 1970), 95. Hinting at the idea that the transgression of Adam and Eve was related to the killing of an animal and the eating of its flesh, the *Pirkê de Rabbi Eliezer* (see note 18) indicates that the animal skins that God puts on Adam and Eve (Genesis 3:21) eventually found their way to Nimrod (Ch. XIV, 175).

down towns, and amassing treasures.⁵² 50 is also the number corresponding to the year of the fulfillment of a jubilee, a period defined by the elapsing of seven sabbatical terms, $7 \times 7 = 49$, with the fiftieth year being the jubilee, a time of atonement and of joy, when the land and slaves are released from bondage, and when debts are repaid:

Count off seven sabbath years – seven times seven years – so that the seven sabbath years amount to a period of forty-nine years. Then have the trumpet sounded everywhere on the tenth day of the seventh month; on the Day of Atonement sound the trumpet throughout your land. Consecrate the fiftieth year and proclaim liberty throughout the land to all its inhabitants. It shall be a jubilee for you; each of you is to return to your family property and to your own clan. The fiftieth year shall be a jubilee for you; do not sow and do not reap what grows of itself or harvest the untended vines. For it is a jubilee and is to be holy for you; eat only what is taken directly from the fields. (Leviticus 25:8–12 NIV)

The number 7, the factor explaining the length of the dragon, is an indication that the dragon is the “sevenfold punishment” that Beowulf had to expect from his killing of the Cainite Grendels. The compounding of the 7 by another factor of 7 evokes such multiplications as were seen in the case of Lamech (Genesis 4:24). That Beowulf’s reign comes to an end with the attack of the demonic dragon precisely on the year of the completion of the period of time corresponding to a jubilee, $7 \times 7 + 1$ years, clearly conveys the idea that the simultaneous deaths of the hero and the monster are to be understood as a jubilee of sorts, i.e., a cause for celebration and shouting for joy (Vulgate Latin, *iobeleus* [Lev. 25:10] < *iubilo*, *iubilare* [to shout joyfully]), a time of liberation from an oppressive tyrant, which calls for the proclamation of freedom by means of the trumpet (Septuagint Greek, “διαγγελεῖτε σάλπιγγι . . . ἄφεςιν” [Lev. 25:9–10]). It is also a hint about the fact that the *Book of Jubilees* was well-known to the *Beowulf* poet and is one of the keys necessary to decipher its mysterious situations, particularly through the references in *Jubilees* to Cain’s sister and to the sword of God’s justice, by which the giants are doomed to slaughter one another.

Structurally speaking, *Beowulf*, a text currently divided in most editions into 43 sections or fitts, should be considered a work in progress, still in somewhat of a draft stage, much like the still ongoing self-destruction of the giants that is its

52 See the contribution of Warren Tormey to this volume, “Waste, Excess, and Profligacy as Critiques of Authority in Fourteenth-Century English Literature,” where he discusses literary representations of the wasteful, greedy, and destructive behavior of wealthy landowners in medieval England, which is highly reminiscent of the way of life represented in the epic by the dragon and by Beowulf himself.

central concern.⁵³ Whether its author meant for it to be so divided or even divided at all, it is likely that *Beowulf* should feature 50 fitts, i.e., that seven of its fitts are yet to be discovered, carved out of the existing text, or written out by a future author.

Conclusion

Destined to burn down to the ground, Heorot Hall summons, by its very existence and the merry-making and violence it harbors, the evil spirits of its own doom: “Sele hlífade / hēah ond hornġēap; heaðowylma bād / lāðan liġes” (81–83; the hall towered, high and broad-horned; it awaited the onslaught of the hateful flame). The killing of the Grendels indeed does not solve the Danes’ problems, only compounds and multiplies them. As the *Beowulf* poet explicitly states, the Danes, no more and no less than the Geats we might add, are pagans who offer unholy sacrifices and worship demons at their temples:

Hwilum hie geheton	æt hærgtrafum
wigweorþunga,	wordum bædon
þæt him gastbona	geoce gefremede
wiðþeodþreaum.	Swylc wæs þeaw hyra,
hæþenra hyht;	helle gemundon
in modsefan,	metod hie ne cuþon,
dæda demend,	ne wiston hie drihten god,
ne hie huru heofena	helm herian ne cuþon,
wuldres waldend. . .	(175–83)

[Often they offered honor to idols at heathen temples; with words they prayed that the soul-slayer grant them comfort for the suffering of the people. They harbored hell in their spirits; they did not know the Lord, the fashioner of destiny; they did not know the God of righteousness, neither could they indeed give praise to the helm of the heavens, the wielder of glory . . .]

Effectively their *hærgtræf*, Heorot is the place where the Danes boast and defile themselves, quarreling, drinking themselves unconscious and slaughtering one another every night. The center of their society, Heorot Hall is “hornreced” (704; building with horns), not unlike the Mesopotamian and Canaanite horned shrines/temples, dedicated to bull-gods like El, Ba’al, and Moloch, where apparently, at

53 R. D. [Robert Dennis] Fulk, “The Origin of the Numbered Sections in *Beowulf* and in other Old English Poems,” *Anglo-Saxon England* 35 (2006): 91–109.

least in the Canaanite case, human sacrifices were offered, of children no less, perhaps the most monstrous and unnatural of all misdeeds.⁵⁴

For all his heroic willingness to face the monsters, Beowulf himself is an exemplar of the doomed way of life of predatory humans, a monster no less than his antagonists, also responsible for the downfall of the people he meant to protect. Killing Grendel is killing Cain and killing Cain is punishable “sevenfold,” i.e., by the fifty-foot-long dragon that arrives on the jubilee of Beowulf’s reign and brings death and devastation to Beowulf’s country, also taking Beowulf’s life, and no doubt his soul. Like Lamech in the seventh generation, who kills Cain and his own son, and whose offspring constitute the end of the male line of Cain, Beowulf too kills the killers, kin of Cain, and dies without an heir, his legacy a huge hoard of treasures and weapons, useless to people facing the end of their world.

Given such events and the biblical substance of the inspiration of the *Beowulf* poet, the images of the dragon and the funeral pyre on which Beowulf is burned have to be understood as eschatological allusions and prefigurations of the Jubilee of Jubilees, that is, the Last Judgment, when, after seventy-seven generations of human misdeeds, the seven trumpets of the seven angels will be sounded, at the opening of the seventh seal of the Scroll of Revelation (or Jewish Torah or Mesopotamian Tablet of Destinies or Germanic Wyrd). It is the time of the redemption of what God created in seven days – represented by the seven candles in the seven-branched Temple Menorah – the day of the liberation of nature from the oppression of monstrous humans intent on destroying and devouring it.

Though the philologist need not necessarily subscribe to the poet’s doomsday visions, philology, poetry, and prophecy may not be as distinct from one another as they may seem. Fate, after all, is an effect of grammar; the past participle of the Latin verb *for/fari*, which means, “to speak.” Fate then, as *fatum*, is that which has been spoken. It is also what has been written and interpreted by philological

54 A cylinder seal from Susa (ca. 3,800–3,100 B.C.E.), now at the Louvre, shows a horned temple: <https://collections.louvre.fr/en/ark:/53355/cl010176193> (last accessed on Dec. 3, 2023). A Canaanite horned shrine of Moloch is described in rabbinical commentaries in *Midrash Tanchuma: S. [Solomon] Buber Recension*, trans. John T. Townsend. 3 vols. (Hoboken, NJ: KTAV, 1989–2003), in the Appendix to Parashah Vaetchanan, 2, online at: https://www.sefaria.org/Midrash_Tanchuma_Buber/ (last accessed on Dec. 3, 2023). See also the illustrations of Iohann W. Michaelis in Johann Lund [Iohannes Lundius], *Die alten jüdischen Heilighümer, Gottesdienste und Gewohnheiten* (1711; Hamburg: Christian Wilhelm Brand, 1738), two plates between pp. 638–39; and George F. Moore, “The Image of Moloch,” *Journal of Biblical Literature* 16 (1897): 161–65. Loosely following ch. 3 of the biblical Book of Daniel, the Anglo-Saxon *Daniel* alludes to such sacrifices of youths, commanded by the Babylonian tyrant Nebuchadnezzar II, who orders three Jewish young men to be thrown into a furnace for refusing to worship a golden idol (ll. 168–240): Krapp, *Junius Manuscript* (see note 28), 111–32.

procedures. It should then not be surprising that poetic prophecy can take on the form of philology.

Daniel, the prophet who foretold the downfall of mighty Babylon, did so by deciphering the message written by a disembodied hand on the walls of the great hall where King Belshazzar and his noble friends feast, drink wine, and display the loot of gold and silver taken from the Jerusalem temple by Belshazzar's (grand)father, Nebuchadnezzar II (Daniel 5:1–30). Daniel explains that the hand that wrote the message on the wall was sent by God because Belshazzar is proud and hubristic, “you, Belshazzar, . . . have not humbled yourself, . . . you have set yourself up against the Lord of heaven” (5:22–23 NIV) – a characterization consistent with the identification of the king of Babylon as Lucifer in Isaiah 14:12.⁵⁵

Daniel also points out his worship of false idols, “of silver and gold, of bronze, iron, wood and stone, which cannot see or hear or understand. But you did not honor God who holds in his hand your life and all your ways” (5:23 NIV). At least to Daniel, the meaning of the inscription – מְנָא מְנָא מְנָא וּפְרָסִיךְ *mānē mānē tʔqal u-pras* (5:25; numbered, numbered, weighed, and sundered) – is unequivocal:

Mene: God has numbered the days of your reign and brought it to an end.

Tekel: You have been weighed on the scales and found wanting.

Peres: Your kingdom is divided and given to the Medes and Persians.

(Daniel 5:26–28 NIV)

As has been noted by Klaeber and others, the parallels of Belshazzar's banquet hall to Hrothgar's mead-hall are remarkable. The Danes gather there to feast, drink mead, boast, and distribute the loot of gold rings, necklaces, weapons, and other treasures stolen from other peoples. Hrothgar and his Danes are also guilty of worshipping false gods at *hærgtrafum* (175; heathen temples). The severed arm of Grendel that is put on display at Heorot Hall, as a “tācen sweotol” (833; clear sign/token), is not entirely unlike the disembodied hand that writes on the walls

55 Gunkel believed that the expression, הֵלֵל בֶּן שָׁחַר *hêlêl ben šāḥar* (Lucifer/morning star, son of dawn), can be read as a personal identifier of Hêlêl/Helal (הֵלֵל *hêlêl* [Strong 1966; “the morning-star ... Lucifer”]), a hubristic hero-god linked to the morning star, who sought to become the equal of ‘Elyon, a primordial deity with attributes of a sun god (Amorite/Hittite/Hurrian: Alalu/Alal; Greek: Helios; also an epithet of Yahweh Elohim himself, אֵל עֶלְיוֹן *‘el ‘elyôn* (Genesis 14:19 and elsewhere; El/God, the Highest): *Schöpfung und Chaos* (see note 2), 133. Marvin H. Pope, *El in the Ugaritic Texts*. Supplements to Vetus Testamentum, 2 (Leiden: E. J. Brill, 1955), 55. In an astronomical sense, the battle of Helal and ‘Elyon is a representation of the rise and fall of the brightest star in the heavens, the morning (also the evening) star, the planet Venus. Names of Yahweh/Jehovah such as ‘El, ‘Elohim, and ‘Elyon make evident the Sumero-Babylonian, Canaanite, also Greek, sources of the identity of the Hebrew God, in addition to that of God's adversary, Satan/Lucifer.

of Belshazzar's hall.⁵⁶ The hand of Grendel after all tells the story of fratricides stretching from Cain to the days of Grendel:

... þæt wæs tæcen sweotol
 syððan hildedēor hond ālēgde,
 earm ond eaxle – þær wæs eal ġeador
 Grendles grāpe – under ġeapne hr(ōf). (833–36)

⁵⁶ Klaeber believed both the Anglo-Saxon *Genesis A* and *Daniel*, among other texts of biblical inspiration, to be significantly related to *Beowulf*: "One of the reasonably certain relations brought to light by a close comparison of various Old English poems is the influence on *Beowulf* of the extensive poem of *Genesis (A)*, . . . Not only do we discover numerous and noteworthy parallelisms of words and phrases, many of them being traceable nowhere else, but the occurrence in both poems of the religious motives of the Creation, Cain's fratricide, the giants and deluge (not to mention what has been called the Old Testament atmosphere), . . . Likewise the priority of *Daniel* has been fairly demonstrated. It can hardly be doubted that the picture of a king (Nebuchadnezzar) living in splendor and opulence, who suffers punishment for his pride, is reflected in Hrōðgār's edifying harangue, 1700 ff. [1700–84] Also the 'devil' worship of the Danes, 175 ff. [175–83], is curiously suggestive of the idolatry practiced by the Babylonians. In both instances the phraseological correspondence is sufficiently close. That Hrōðgār should caution Bēowulf against the sin of pride, and that the poet should go out of his way to denounce the supposed heathen worship among the Danes, will not appear quite so far-fetched, if the author was guided by reminiscences of *Daniel* which he adapted – not entirely successfully – to the subject in hand": *Beowulf and the Fight at Finnsburg*, ed. Frederick J. Klaeber. Third Edition (1922; Lexington, MA: D. C. Heath, 1950), cx–cxi. Also P. G. [Percy Goronwy] Thomas, "Beowulf and Daniel A," *Modern Language Review* 8.4 (1913): 537–39. In *Literacy and Power in Anglo-Saxon England*. Regents Studies in Medieval Culture (Lincoln, NE: University of Nebraska Press, 1991), Seth Lerer discusses the Anglo-Saxon *Daniel* and relates the literacy of the prophet to his interpretive abilities and political influence (126–57), also comparing that situation to Hrothgar's 'reading' of the inscription on the hilt of the giants' sword (172), as figures for the literacy of the *Beowulf* poet and his readers (158–94). Ch. 5 of Lerer's book, "Hrothgar's Hilt and the Reader in *Beowulf*" (158–94) was reprinted in *The Postmodern Beowulf: A Critical Casebook*, ed. Eileen A. Joy and Mary K. Ramsey (Morgantown, WV: West Virginia University Press, 2006), 587–628. Contrary to what Lerer claims, however, the inscription on the hilt is not a self-conscious allusion to the poem itself but to its biblical sources, mediated by *Enoch*-influenced Germanic texts, such as the Saxon *Genesis*, the Anglo-Saxon *Genesis A* and *Genesis B*, and, most significantly, the Anglo-Saxon *Daniel*, where the fundamental problem is that the Israelites become proud during their drunken banquets, "hie wlenco anwod æt winþege / deofoldædum, druncne geðohtas" (l. 17; pride possessed them at their wine feasts, [along] with demonic deeds and drunken thoughts), and turn to "deofles cræft" (l. 22; devil's craft), i.e., worshipping pagan gods at heathen temples, exactly as Hrothgar's Danes: Krapp, *Junius Manuscript* (see note 28), 111–32; here 111. The opening lines of the Anglo-Saxon *Daniel* are shockingly similar to those of *Beowulf* and, in addition to other parallels, make it virtually certain that the two texts are connected by more than just accidental resemblances. The Anglo-Saxon *Daniel* is also further evidence of the profoundly biblical inspiration of the *Beowulf* poet.

[That was a clear sign, after the warrior laid the hand under the curvy roof, arm and shoulder, which was, all together, the grip of Grendel.]

In *Beowulf*, the philologist, ironically, is the supposedly illiterate Hrothgar, as he receives from Beowulf the head of Grendel and the hilt of the giants' sword. Hrothgar indeed appears to understand the inscription and its story of the destruction of the giants by the flood and the sword.⁵⁷ Another sign silently inscribed in the trophies is the identity of Grendel, now made clear by the display of his head. Strangely, but very significantly, Hrothgar launches into an extended sermon (1709–68) – illustrated by the mention of his own overconfidence over “hund missera” (1769; one hundred half-years, i.e., fifty years) followed by the ravages of Grendel – warning Beowulf about the dangers of pride and the evil example of bad kings like Heremod, who killed his own table-companions at his bloody feasts (1709–24).

Put together, the head of Grendel and the runic inscription provide then the evidence of what Beowulf has done, and what he can expect will transpire in the future. After all, Beowulf, a giant among men, has killed two giants, both killers and kin of Cain. What Beowulf has in common with Belshazzar is the fact that they both put gold and glory, false idols and pride, over the law of the Lord of Heaven, who holds in His Hand their lives and all their ways. Their days were therefore, from the moment of the commission of their murders, “numbered, numbered . . .” by factors of seven and their jubilees, “. . . weighed, and sundered.”

Ultimately, the story written on the hilt of the giants' sword in *Beowulf* is the violent history of unnatural humans – written in blood by the sword, the evil instrument of such ‘writing’⁵⁸ – to which both biblical literature and *Beowulf*, as well as the Scandinavian sagas, are critical responses. In substantial ways, the point of the hilt scene is to connect the biblical giants' violent and hubristic pride, and their destruction in a natural catastrophe, the Great Flood, to the deaths of

57 On Hrothgar as reader/interpreter, see Lerer, *Literacy and Power* (see note 56), 158–94. On the idea that Hrothgar is illiterate and could not have read the inscription, in his own or any other language, see, for example, Richard J. Schrader, “The Language on the Giants' Sword Hilt in *Beowulf*,” *Neuphilologische Mitteilungen* 94.2 (1993): 141–47. Regardless of whether Hrothgar actually reads or just intuitively senses the implications of what is recorded on the hilt, this is a dramatic moment of revelations that bring about a better and deeper understanding of the situation to both the readers of the poem and to Hrothgar, as argued by Dennis Cronan, “Hroðgar and the *Gylden Hilt* in *Beowulf*,” *Traditio* 72 (2017): 109–32.

58 In the Anglo-Saxon *Daniel*, the letters that appear on the wall are red: “engel drihtnes / let his hand cuman in þæt hea seld, / wrat þa in wage worda gerynu, / baswe bocstafas” (720–23; the angel of the Lord let his hand enter the high hall; wrote then on the wall mysterious words, in red book-staves).

the Grendel giants, and also that of Beowulf, who himself is a murderous giant bent on the pursuit of gold and glory. Thus, in spite of the lessons of the sword's hilt and Hrothgar's warnings, Beowulf goes on to rule the Geats for fifty years, driven by the same pride, greed, and violence that he showed as a young man seeking adventures in Denmark. His violent death at the poisonous fangs of the fifty-foot-long, gold-hoarding dragon, as well as the fire that consumes his body and his treasures, are the poet's unequivocal warnings of the fate that awaits the mighty and the proud, those who live by the sword and worship the idols of gold, contrary to the laws of God and the order of nature.

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Natural Environment in the *Old English Orosius*: Ohthere's Travel Accounts in Norway

Abstract: The Old English travel accounts generally known as *Ohthere's Voyages* represent – together with Wulfstan's travel report – the main historical document and the earliest written geographical description of Northern Europe which has come down to us as interpolation in the late-ninth century Old English translation of Paulus Orosius's *Historiarum adversum Paganos Libri Septem*. Ohthere describes three sea journeys, one from his homeland (*Halgoland*) northward to the White Sea, one southward to the Norwegian port called *Sciringes heal*, and the last from this port to the Danish trading settlement *æt Hæþum*. Ohthere's description of the voyages is enriched with nautical details and with both geographical and ethnographical information on the Norwegian territory, on the peoples he meets (e.g., the *Finnas* and the *Beormas*), and on their settlements and ways of living. The accounts have been long studied from both philological and historical points of view, especially from a geographical, nautical, political, and economic angle. The aim of this paper is to investigate Ohthere's travels from a deeper natural perspective, that is, in their description of the natural environment and of its relationship with people highlighting, on the one hand, the description of rural and agricultural landscapes, i.e., of a nature which can be seen as 'subordinate' to human and human activities, and, on the other, the description of wilderness and wastelands with temporary settlements, in order to ascertain whether some depictions can be considered and analyzed as long-term factors (such as, for example, the whale- and walrus-hunting) of present-day conditions and situations.

Keywords: *Old English Orosius*, *The Old English History of the World*, Ohthere's voyages, Northern Europe, natural environment, ecocriticism

Introduction

The relationship between humans and nature is a very old one, as humans have always conceived nature, environment, and natural resources as something which could be used in order to satisfy all their needs (vital needs, economic needs, politi-

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cal needs). This means that human existence as well as human activities have always affected nature and natural environment.¹

This paper deals with the general idea of nature as referred to as the natural environment and as an equivalent to wilderness, thus including all those elements, such as landscapes, trees and plants, forests, mountains, seas, as well as animals, which are not made by humans, but which over thousands of years have been used by them in order to satisfy their needs. In fact, a concept of nature as something exploitable by humans has always been, and even before the Industrial Revolution the environment has been seen “in terms of ‘natural resources’ for human consumption”;² the results and the (negative) effects of this idea can be found in many of the present-day conditions, such as the global environmental crisis, the deforestation, or the extinction of animal species.³

This connection between human and natural world is reflected in culture and in literature, especially in the way literary texts describe the natural environment and how human activities affect it. As Joseph W. Meeker has pointed out, “plants, animals, mountains, seas, and sky have traditionally been represented in literature as a complete system in which human beings find or create their proper place,”⁴ and literature can offer an insight “into human relationship with other species and with the world around us.”⁵

1 On this, see Cheryll Glotfelty, “Introduction: Literary Studies in an Age of Environmental Crisis,” *The Ecocriticism Reader. Landmarks in Literary Ecology*, ed. Cheryll Glotfelty and Harold Fromm. (Athens, GA, and London: The University of Georgia Press, 1996), xv–xxxvii; here xix. For the relationship between humans and natural environment see also Albrecht Classen, *The Forest in Medieval German Literature: Ecocritical Readings from a Historical Perspective*. Ecocritical Theory and Practice (Lanham: Lexington Books, 2015), 1–38, and especially 15; Albrecht Classen, *Water in Medieval Literature: An Ecocritical Reading*. Ecocritical Theory and Practice (Lanham: Lexington Books, 2017), vii–xlvi.

2 Heide Estes, *Anglo-Saxon Literary Landscapes. Ecotheory and the Environmental Imagination*. Environmental Humanities in Pre-Modern Cultures (Amsterdam: Amsterdam University Press, 2017), 34.

3 On this, see Estes, *Anglo-Saxon Literary Landscapes* (see note 2), 19: “Ecocritics understand human activities as having caused harm to the earth and its non-human elements and creatures, and see the critical enterprise as engaged with efforts to reduce consumption and slow the process of climate change.”

4 Joseph W. Meeker, *The Comedy of Survival: Studies in Literary Ecology* (New York: Scribner, 1974), 9.

5 Meeker, *The Comedy of Survival* (see note 4), 4. Not only literary texts, but even functional works, such as, for example, charters and boundary clauses can be useful to understand the relationship between humans and the environment, as they reveal the use of the land and nature by humans; on this, see Michael Bintley, “Reading Early Medieval Landscape and Environment: Materially Engaged Approaches to Documentary Sources,” *Reading the Natural World in the Middle Ages and the Renaissance: Perceptions of the Environment and Ecology*, ed. Thomas Willard. Arizona Studies in the Middle Ages and the Renaissance, 46 (Turnhout: Brepols, 2020), 3–20; here 10.

An environmental perspective as well as an ecocritical approach to literary texts imply a particular kind of reading which highlights the relationship between human and nature in literature,⁶ and which leads to a deeper “knowledge about our own world.”⁷ In this respect, medieval literary texts are an important source, for, as Heide Estes has argued, “the study of early literatures, and their constructions of the human, of animals, and the environments built and occupied by humans, are important for an understanding of contemporary crisis.”⁸

Therefore, this paper aims at offering a re-reading of the earliest written geographical description of Northern Europe interpolated in the Old English version of Paulus Orosius’s *Historiae* and, more specifically, of Ohthere’s sea travel accounts from an ecocritical point of view in order to investigate the relationship between human and natural environment in Anglo-Saxon literature and to ascertain whether some descriptions can be considered as long-term factors of present-day situations.

The *Old English Orosius*

The text of Ohthere’s travel accounts, along with Wulfstan’s voyage report, has come down to us embedded in the so-called *Old English Orosius*, or *The Old English History of the World*,⁹ i.e., in the vernacular translation of the Latin *Historiarum adversum Paganos Libri Septem*.

The Latin text was written during the second decade of the fifth century by the Spanish cleric Paulus Orosius (ca. 380–ca. 420), who, after the sack of Rome in 410, was encouraged by his mentor, St. Augustine of Hippo (354–430), to produce a companion work in order to point out that the decadence of Rome was not due to Christianity and that the past pagan eras were unstable and affected by wars and misery too.¹⁰

6 On this, see Glotfelty, “Introduction: Literary Studies in an Age of Environmental Crisis” (see note 1), xviii. See also Classen, *Water in Medieval Literature* (see note 1), xi.

7 Courtney Nicole Lechmann, *Water, Prestige, and Christianity: An Ecocritical Look at Medieval Literature*. UNLV Theses, Dissertations, Professional Papers, and Capstones, 2696 (Las Vegas: University of Nevada, 2016), 14.

8 Estes, *Anglo-Saxon Literary Landscapes* (see note 2), 29.

9 The *Old English Orosius* has been recently retitled by Malcolm R. Godden, who published in 2016 a new edition with a modern English translation of the text (Malcolm R. Godden, *The Old English History of the World: An Anglo-Saxon Rewriting of Orosius*. Dumbarton Oaks Medieval Library, 44 (Cambridge, MA, and London: Harvard University Press, 2016).

10 On this, see Godden, *The Old English History of the World* (see note 9), ix–x; Irmeli Valtonen, *The North in the Old English Orosius. A Geographical Narrative in Context*. Mémoires de la Société Néophilologique de Helsinki, LXXIII (Helsinki: Société Néophilologique, 2008), 95.

The text provides a universal history from an imperial and Christian perspective, that is, an overview of the history of the ancient world based on the succession of the four empires (i.e., the empires of Assyria and Babylon, Macedonia, Carthage, Rome), and it is preceded by a geographical prologue which covers the three continents known at the author's time (Asia, Europe, and Africa), thus allowing his readers to have the right geographical background for the historical events described within the text, as well as the right perception of the spread of Christianity.¹¹

Orosius's work enjoyed great popularity and became one of the most influential historical and geographical sources during the Middle Ages.¹² Between the ninth and the tenth century¹³ the Latin text was translated into Old English, probably by the will of King Alfred (r. 871–899) and perhaps as a part of his cultural program which aimed at rendering into vernacular important Latin works, such as Gregory the Great's *Cura pastoralis* and *Dialogi*, Boethius's *De consolazione Philosophiae*, St. Augustine's *Soliloquiae*, Bede's *Historia Ecclesiastica Gentis Anglorum*, in order to restore and improve literacy in Anglo-Saxon England.

The text is transmitted in two manuscripts, London, British Library, MS Additional 47967 (L) and London, British Library, MS Cotton Tiberius B.i (C), as well as in two further fragments, Oxford, Bodleian Library, Eng. Hist. e. 49 (30481) (B), which preserves two folios transmitting some parts of the third book of the *Old English Orosius*, and Vatican City, Biblioteca Apostolica Vaticana, Reg. Lat. 497 (V), fol. 71 with chapter xi of the fourth book.¹⁴

As for the two main witnesses, MSS L and C, they share a common ancestor, which "was at least one remove from the original translation."¹⁵ MS L, also known as Lauderdale or Tollemache manuscript, was copied in the first half of the tenth century in Winchester most probably by the second scribe of the Parker MS of the *Anglo-Saxon Chronicle* and of the English glosses of the *Junius Psalter*.

11 On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 97–98.

12 On this, see Janet Bately (with a note by E. G. Stanley), "Oththere and Wulfstan in the *Old English Orosius*," *Oththere's Voyages. A Late 9th-Century Account of Voyages Along the Coasts of Norway and Denmark and its Cultural Context*, ed. Janet Bately and Anton Englert. Maritime Culture of the North, 1 (Roskilde: Viking Ship Museum, 2007), 18–39; here 18.

13 According to Janet Bately, the vernacular rendering of Orosius's work was produced between 889 and 899. On this, see Janet Bately, *The Old English Orosius*. The Early English Text Society. Supplementary Series, 6 (London, New York, Toronto: Oxford University Press, 1980), lxxxvi–xciii; Bately, "Oththere and Wulfstan in the *Old English Orosius*" (see note 12), 21.

14 For a detailed description of the manuscripts preserving the Old English version of Orosius's work see Bately, *The Old English Orosius* (see note 13), xxiii–xxvi.

15 Bately, *The Old English Orosius* (see note 13), xxxiii. On this, see also Godden, *The Old English History of the World* (see note 9), 419. For the relationship between the manuscripts see Bately, *The Old English Orosius* (see note 13), xxxi–ix.

The manuscript, which also contains some notes in Old English, does not transmit the entire text of the *Old English Orosius*, as the second gathering (fol. 9–16), which most probably corresponded to the last two-thirds of Ohthere's account, to the whole Wulfstan's travel report, to the last part of the geographical section as well as to the first chapters of the historical part,¹⁶ is completely lacking.

The second witness, MS C, was written during the first half of the eleventh century in Abingdon and it contains the verse *Menologium* (fol. 112r–114v), *Maxims II* (115r–v), the C version of the *Anglo-Saxon Chronicle* (115v–164r) up to AD 1066. The *Old English Orosius* is transmitted at folios 3r–111v and “seems to be written in four hands.”¹⁷

We do not know anything about the author/translator of the Old English version. In his *Gesta Regum Anglorum* William of Malmesbury (ca. 1085/90–1143) attributed the translation to King Alfred, but during the second half of the twentieth century his statement as well as King Alfred's authorship were definitively rejected.¹⁸ We can infer that “the author was a West Saxon with good knowledge of Latin and a reasonable familiarity with ancient history, but nothing else is known of him.”¹⁹ Therefore, the main opinion is that the translation was undertaken by one (or even more than one)²⁰ author, who made use not only of Orosius's *Historiae*, but also of other textual sources, such as classical and patristic texts, along with ‘contemporary’ sources, which were used for the sections specifically dealing with geography.

As for the travel reports of Ohthere and Wulfstan,²¹ the two accounts can be considered as “original contributions and have no known written sources.”²²

16 On this, see Bately, *The Old English Orosius* (see note 13), xxiii–v; Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 18–19; Valtonen, *The North in the Old English Orosius* (see note 10), 259–60.

17 Bately, *The Old English Orosius* (see note 13), xxv; on this, see also Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 18–19; Valtonen, *The North in the Old English Orosius* (see note 10), 260.

18 On this, see Janet M. Bately, “King Alfred and the Old English translation of Orosius,” *Anglia* 88 (1970): 433–60; Bately, *The Old English Orosius* (see note 13), lxxiii–lxxv; Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 21.

19 Godden, *The Old English History of the World* (see note 9), xi.

20 “The work may indeed have been part of a collaborative project, since some modern scholars have seen linguistic and stylistic evidence that more than one writer was involved in *The Old English History*” (Godden, *The Old English History of the World* (see note 9), xii). On this, see also Bately, *The Old English Orosius* (see note 13), lxxiii–lxxxvi; Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 21; Valtonen, *The North in the Old English Orosius* (see note 10), 268–77.

21 For the sources, see Bately, *The Old English Orosius* (see note 13), lv–lxxii.

22 Valtonen, *The North in the Old English Orosius* (see note 10), 261.

The Geographical Section in the *Old English Orosius*

The vernacular rendering of Orosius's *Historiae* is not a *verbatim* translation, rather an abridged version with 84 chapters instead of 236; therefore, it can be considered as a sort of "adaptation"²³ or "paraphrase"²⁴ of the Latin original with omissions, rewritings, and additions.

As for the geographical section, the text is an almost faithful rendering of the original Latin work.²⁵ Nevertheless, it is updated by the addition of new details and descriptions, especially in the chapter dealing with continental Europe and in the description of *Germania*, which occurs after the geography of Asia, as well as by the interpolation of the sea travel accounts of Ohthere and Wulfstan.²⁶

The description of *Germania* is based on a list of ten selected or 'pivotal' areas within the rivers Rhine and Don, which are its west and east boundaries, and the river Danube and the *Cwensæ*,²⁷ that are the southern and the northern ones. These ten areas correspond to the territories of ten main groups, i.e., East Franks, Saxons, Moravians, Daleminzi, Chorvati in the regions east of the Rhine, and South Danes, North Danes, Osti, Bornholmers, Swedes in the regions north of the Danube. For each pivotal area the text provides information on its boundaries and surrounding regions.²⁸

23 Godden, *The Old English History of the World* (see note 9), xi.

24 Bately, *The Old English Orosius* (see note 13), xciii.

25 On this, see Godden, *The Old English History of the World* (see note 9), 431. The geographical section opens the vernacular rendering of Orosius's work (Book I.1), whereas in the Latin text the description of the three continents Asia, Europe, and Africa occurs in Book I.2.

26 On this, see Bately, "Ohthere and Wulfstan in the *Old English Orosius*" (see note 12), 23.

27 The name *Cwensæ* is strictly related to the ethnonym *Cwenas*, which only occurs in the Old English version of Orosius's *Historiae* and which corresponds to Old West Norse *Kvenir*, generally indicating a northern tribe also mentioned in Old Icelandic sagas and Old Norwegian historical texts (on this, see Irmeli Valtonen, "Who were the *Cwenas*?", *Ohthere's Voyages. A Late 9th-Century Account* [see note 12], 108–09).

The term *Cwensæ* is much debated, as it is not sure whether it indicated a real or an imaginary sea and if it was really in use during the ninth century. In any way, it is used in the *Old English Orosius* to indicate the northern-most boundary of *Germania* and to render into vernacular the Latin expression *Oceanus septentrionalis*. On this, see Janet Bately, "Translation Notes. With Two Notes by E.G. Stanley," *Ohthere's Voyages. A Late 9th-Century Account of Voyages* (see note 12), 51–58; here 52.

28 The same kind of description based on pivotal points is used for the following sections dealing with the regions south of the Danube and west of the Rhine. After the geography of Europe, the text continues with the section on Africa. On this, see Bately, *The Old English Orosius* (see note 13), lxxviii–lxx; Valtonen, *The North in the Old English Orosius* (see note 10), 320–22; see also

Unfortunately, it is not possible to determine the source(s) used for the new material in the geography of *Germania*. As already said, ‘contemporary’ sources could be available to the author(s) of the vernacular adaptation of Orosius’s work, as, for instances, oral accounts, Latin or vernacular texts, maps and plans, records of pilgrims, now-lost commentaries of the Latin text or, maybe, even an interpolated version of the Latin *Historiae* which has not come down to us.²⁹

Ohthere and Wulfstan’s Travels

As Irmeli Valtonen has pointed out, the Old English version of Orosius’s *Historiae* shows an evident interest for the northern parts of *Germania*, as five of the listed pivotal groups are both Nordic (South and North Danes, Bornholmers, Swedes) and Baltic peoples (Osti).³⁰

The travel accounts of Ohthere and Wulfstan confirm this evident focus on the North in the vernacular text. In fact, these two reports are interpolated in the geographical section after the end of the description of Europe north of the Danube and east of the Rhine and before the section dealing with the geography of Europe south of the Danube.

The section with the travel reports begins abruptly, i.e., with a sudden “switch from an impersonal narrative . . . to a third person narrative,”³¹ in which Ohthere and Wulfstan’s accounts are “apparently presented orally,”³² that is, as recorded stories of two eyewitnesses who were visiting King Alfred and his court.

The first travel account is introduced by the phrase “Ohthere sæde his hlaforde, Ælfrede cyninge”³³ (Ohthere said to his lord, King Alfred), suggesting that the report was made at the West Saxon court of King Alfred, even if there is no further textual evidence that the king was really present during Ohthere’s visit, nor there is an explanation of the kind of relationship between Ohthere and Alfred.³⁴ In this respect, Ohthere’s status is still a matter of conjecture, as it has

Kemp Malone, “King Alfred’s North: A Study in Medieval Geography,” *Speculum* 5.2 (1930): 139–67.

²⁹ On this, see Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 24–25.

³⁰ On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 322.

³¹ Valtonen, *The North in the Old English Orosius* (see note 10), 272.

³² On this, see Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 26.

³³ Bately, *The Old English Orosius* (see note 13), 13/29 [both here and below, the first number refers to the page number of Bately’s edition, whereas the second one to the line or lines].

³⁴ On this, see *Two Voyagers at the Court of King Alfred. The Ventures of Ohthere and Wulfstan together with the Description of Northern Europe from Old English Orosius*, ed. Niels Lund, transl.

been assumed that he may have been a farmer or a landowner or a merchant in Alfred's service or in exile, or simply a trader and traveler.³⁵

As for his life and background, the text informs that he was a Norwegian living furthest north of all Norwegians, in a northern region called *Halgoland*³⁶ beside the *Westsæ* (Western Sea), that he was a prosperous man and that his wealth was based on the possession of wild animals and on the collection of tributes paid by the *Finnas*³⁷ consisting in animal skins, bird feathers, whale's bone, ship's ropes.³⁸ Moreover, we are told that he was a trader and a whale and walrus hunter, and that he traveled not only to explore the northern regions, but mainly to hunt walruses for their bone and skin.³⁹

The text reports the description of three different sailing voyages: the first one is an Arctic voyage northward along the coast, from Ohthere's home by the *Westsæ* to a river on the Kola Peninsula, i.e., to the region settled by the *Beormas*⁴⁰; the second from Ohthere's region southward to a port called *Sciringes*

Christine E. Fell. With Contributory Essays by Ole Crumlin-Pedersen, P. H. Sawyer, and Christine E. Fell (York: William Sessions, 1984), 13; Valtonen, *The North in the Old English Orosius* (see note 10), 283–88; Godden, *The Old English History of the World* (see note 9), 432–33 (note 1, 16–27).

35 On this see, Godden, *The Old English History of the World* (see note 9), 433.

36 Old Norse *Hálogaland*, the region lived by a people called the *Háleygyr*. The Old English rendering of the region's name is assumed to be a misinterpretation of the Old Norse term: The Anglo-Saxon writer of the *Old English Orosius* most probably identified the first part of the word – *háloga* – with the contracted form of Old English *halig* 'holy', thus rendering the Old Norse ethnonym as 'land of the holy one'. On this see, Bately, "Translation Notes. With Two Notes by E. G. Stanley" (see note 27), 53, and Stefan Brink, "Geography, toponymy and political organization in early Scandinavia," *Ohthere's Voyages. A Late 9th-Century Account* (see note 12), 66–73; here 69.

37 The Old English ethnonym *Finnas* corresponds to Old Norse *Finnar*, which also occurs in Icelandic sagas as generally referred to a nomadic people, the Saami; more rarely it is also used to indicate the Finns; on this, Irmeli Valtonen, "Who were the *Finnas*?" *Ohthere's Voyages. A Late 9th-Century Account* (see note 12), 106–7. On the Saami ethnicity, see also Valtonen, *The North in the Old English Orosius* (see note 10), 373–80. See also Solveig Marie Wang, *Decolonising Medieval Fennoscandia: An Interdisciplinary Study of Norse-Saami Relations in the Medieval Period*. Religious Minorities in the North: History, Politics, and Culture, 5 (Berlin and Boston: Walter de Gruyter, 2023), xix–xx, and 2–6.

38 On this, see Bately, *The Old English Orosius* (see note 13), 15/14–17.

39 Bately, *The Old English Orosius* (see note 13), 14/30–15/6.

40 North Karelians or Baltic Finns, the inhabitants of a region round the White Sea (see Old Norse *Bjarmar*). On this, see Bately, "Translation Notes. With Two Notes by E. G. Stanley" (see note 27), 52. As Solveig Marie Wang has pointed out, the origins of the *Beormas* have been long debated as "there is no corresponding people or landscape today known as Bjarmaland" (Wang, *Decolonising Medieval Fennoscandia* [see note 37], 135).

heal, which has been located in the settlement of Kaupang in Tjølling, Vestfold,⁴¹ and the third from this port to another port, called *æt Hæþum*, which has been identified with Hedeby⁴² on the eastern coast of the Jutland Peninsula.⁴³

The second travel account, i.e., Wulfstan's report, is shorter than that of Oht-here.⁴⁴ Unfortunately, the text does not give any kind of information about the traveler's life or status, as it just tells his name, Wulfstan, which only appears once at the opening of his report.

On the basis of his name and of some details which can be drawn from the text, it has been assumed that Wulfstan may have been a Scandinavian trader with an Anglicized name, or an Anglo-Saxon or a Frisian trader and traveler,⁴⁵ who had a very good knowledge of the Baltic region. The text tells the account of only one sailing voyage from the trading port Hedeby to the mouth of the river Vistula, including a geographical description of *Truso*, which has been identified with Janów Pomorski, near Elbląg, as well as an ethnographical account of funerary rituals in Estland.⁴⁶

41 The settlement Kaupang was an important harbor, trading and marketplace which flourished from the late eighth century to the late ninth century (c. 960–70); on this, see Valtonen, *The North in the Old English Orosius* (see note 10), 331–33, and Dagfinn Skre "The *Sciringes Healh* of Oht-here's Time," *Ohtthere's Voyages. A Late 9th-Century Account* (see note 12), 150–56.

42 Thanks to its geographical location, Hedeby became an important meeting point as well as an international trading place and harbor from the eighth century to the tenth century. On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 354–55.

43 On Ohtthere's voyages, see Malone, "King Alfred's North" (see note 28), 157–61; Irmeli Valtonen, "The North in the 'Old English Orosius'," *Neuphilologische Mitteilungen* 109.3 (2008): 380–84; here 381; Valtonen, *The North in the Old English Orosius* (see note 10), 328–34 and 344–45; Laura Gherardini, "I racconti di viaggio di Ohtere [sic] e Wulfstan, due navigatori alla corte di Alfredo il Grande," *Viaggi, Itinerari, Flussi umani. Il mondo attraverso narrazioni, rappresentazioni e popoli*, ed. Andrea Gimbo, Mattea Claudia Paolicelli, Alessandro Ricci. (Roma: Edizioni Nuova Cultura, 2013), 735–47; here 737; Albrecht Classen, "Traveling to/in the North During the Middle Ages. The World of Northern Europe in Medieval and Early Modern Travel Narratives," *Travel, Time, and Space in the Middle Ages and Early Modern Time. Explorations of World Perceptions and Processes of Identity Formation*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 22 (Berlin and Boston: Walter de Gruyter, 2018), 285–310; here 289.

44 The account opens with the phrase "Wulfstan said . . .," but there is no reference to King Alfred; on this, see Batley, "Ohtthere and Wulfstan in the *Old English Orosius*" (see note 12), 26–27.

45 On this, see Judith Jesch, "Who was Wulfstan?," *Wulfstan's Voyage. The Baltic Sea Region in the Early Viking Age as Seen from Shipboard*, ed. Anton Englert and Athena Trakadas. Maritime Culture of the North, 2 (Roskilde: Viking Ship Museum, 2009), 29–36; Valtonen, *The North in the Old English Orosius* (see note 10), 403–04, and Godden, *The Old English History of the World* (see note 9), 434.

46 On this, see Batley, *The Old English Orosius* (see note 13), 17/6–18/2. The funeral rituals in Estland, which show interesting similarities to a burial ritual described in the Arabic *Risāla* of Ibn Fadlān (tenth century), consisted in preserving a noncremated corpse inside a house, among

As many of the details included in the account were commonly known during the second half of the ninth century, it has been discussed controversially whether Wulfstan's voyage really took place or whether it was rather the written record of an "amalgam"⁴⁷ of information taken from various sources or based on general geographical knowledge.⁴⁸

An Ecocritical Re-reading of Ohthere's Voyages in Northern Europe

From an environmental point of view, Ohthere's account represents an interesting literary source, as this narrative contains details and elements useful in order to investigate how nature was considered during the second half of the ninth century, how it was depicted, and what kind of relationship between human, nature and animals this literary representation reflects.

As already said, in the opening section of his account, we are informed about Ohthere's home region beside the Western Sea:

Ohthere sæde his hlaforde, Ælfrede cyninge, þæt he ealra Norðmonna norþmest bude. He cwæð þæt he bude on þæm lande norþweardum wiþ þa Westsæ. Ha sæde þeah þæt [þæt] land sie swiþe lang norþ þonan, ac hit is eal weste, buton on feawum stowum styccemælum wiciað Finnas, on huntoðe on wintra 7 on sumera on fiscope be þære sæ.

He sæde þæt he æt sumum cirre wolde fandian hu longe þæt land norþryhte læge, oppe hwæðer ænig mon be norðan þæm westenne bude.⁴⁹

friends and relatives, for a month or even more than a month: in fact, the more important or the richer the dead man was, the longer his body was preserved. Kings as well as very rich and leading people could lie noncremated even for half a year. During this period friends and relatives spent their time drinking and playing. On the cremation's day there was a horse race and the dead man's properties (i.e., what was left after the drinking and the games) were divided among the riders. Wulfstan's account very briefly explains that corpses could be preserved for a very long time, for they lied on the ground and for there was a tribe among the Este, who could create coldness. On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 429–33, and Carla Del Zotto, "Esti, Scandinavi e Sassoni nei resoconti medievali di mercanti, viaggiatori e chierici," *Testi cosmografici, geografici ed odeporeici del Medioevo germanico*, ed. Dagmar Gottschall. *Textes et Études du Moyen Âge*, 33 (Louvain-la-Neuve: Fédération Internationale des Instituts d'Études Médiévales, 2005), 41–70.

⁴⁷ Jesch, "Who was Wulfstan?" (see note 45), 32.

⁴⁸ On this, see Przemysław Urbańczyk, "On the Reliability of Wulfstan's Report," *Wulfstan's Voyage. The Baltic Sea Region in the Early Viking Age* (see note 46), 43–47.

⁴⁹ Batley, *The Old English Orosius* (see note 13), 13/29–14/7.

[Ohthere said to his lord, king Alfred, that he lived the furthest north of all Northmen. He said that he lived in the northern region of the land, beside the Western sea. However, he said that that region stretches very far north from there, but it is all waste, excepting in a few places here and there, where the *Finnas* camp, hunting in winter, and fishing in summer along the sea.

He said that he once wanted to find out how far that region extended northward, or whether anyone lived north of that waste area].

This description involves two different kinds of settlements and ways of living, stressed by the use of two different verbs, *buan* and *wician*. Both verbs mean ‘to live’, nevertheless, *buan*, which is used when Ohthere describes his own way of living, means ‘to inhabit, possess, or occupy (and cultivate land),’⁵⁰ and it refers to a permanent settlement, whereas *wician*, which occurs as referred to the *Finnas*, means ‘to camp, encamp’,⁵¹ presupposing a temporary settlement or a camp. What kind of relationship between human and nature do these two different types of settlement reflect and represent? And what kind of impact on nature and natural environment may they have had?

From an environmental perspective, both settlements presuppose two different human approaches to nature. In fact, the first verb, and consequently, the first kind of settlement implies a rural and agricultural landscape, i.e., it suggests an idea of nature as ‘subordinate’ to human and human activities and needs as well as an “arable or pastoral use of land.”⁵² In fact, the text informs that Ohthere’s wellness partly depended on farm animals and agriculture:

He wæs mid ðæm fyrstum mannum on þæm lande; næfde he þeah ma ðonne twentig hryðera 7 twentig sceapa 7 twentig swyna, 7 þæt lytle þæt he erede he erede mid horsan.⁵³

[He was among the foremost men in that country; however, he had no more than twenty cattle, and twenty sheep, and twenty pigs, and the little that he plowed, he plowed with horses].

On the contrary, the second verb is used in the description of a wild and desert landscape (“ac hit is eal weste” [but it is all waste]) and it refers to a kind of settle-

50 See Joseph Bosworth, *An Anglo-Saxon Dictionary Online*, ed. Thomas Northcote Toller, Christ Sean, Ondřej Tichý, (Prague: Faculty of Arts, Charles University, 2014), <https://bosworthtoller.com/41077> (last accessed on Feb. 23, 2024). See also *bú, bý* ‘dwelling, habitation’ (<https://bosworthtoller.com/5360>), generally used in Old Norse texts to indicate farms in the northern regions of Norway (on this, see also Bately, “Ohthere and Wulfstan in the *Old English Orosius*” (see note 12), 27).

51 See Bosworth, *An Anglo-Saxon Dictionary Online* (see note 50), <https://bosworthtoller.com/35517> (last accessed on Sept. 11, 2023).

52 Valtonen, *The North in the Old English Orosius* (see note 10), 291.

53 Bately, *The Old English Orosius* (see note 13), 15/11–4.

ment which apparently entails a less ‘invasive’ approach to nature by humans. Of course, even in case of temporary camps, nature can be considered as subordinate to human needs, as it is useful for human survival, but in a temporary way, depending on the season (hunting in winter, fishing in summer),⁵⁴ and without being completely ‘changed’.

As Christine E. Fell has pointed out, the text constantly repeats this “distinction between the settled areas . . . and the vast areas . . . where there are no permanent settlement sites, but there are the temporary camps of nomadic *Finnas*.”⁵⁵ Thus, for instance in the account of his travel northward, Ohthere describes the settlements of the inhabitants of Bjarmaland, the *Beormas*, and a people living in the Kola Peninsula, the *Terfinnas*,⁵⁶ highlighting the opposition between inhabited and uninhabited territories:

Ne mette he ær nan gebun land sippan he from his agnum ham for, ac him wæs ealne weg weste land on þæt steorbord, butan fiscerum 7 fugelerum 7 huntum, 7 þæt wæron eall Finnas, 7 him wæs a widsæ on ðæt bæcbord. Ða Beormas hæfdon swiþe wel gebud hira land . . . Ac þara Terfinna land wæs eal weste, buton ðær huntan gewicodon, oþþe fisceras, oþþe fugeleras.⁵⁷

[He had not previously found any settled land since he travelled from his own home, but he had always waste land on his starboard side, apart from fishers and fowlers and hunters, and they were all *Finnas*, and he had the open sea on the port side. The *Beormas* had extensively settled their country . . . But the territory of the *Terfinnas* was all waste, except where hunters camped, or fishers, or fowlers].

⁵⁴ Ohthere’s account describes the *Finnas* as hunters and fishers; archaeological investigations have highlighted that hunting was the main subsistence strategy for Saami people during the Early Middle Ages; on this, see Wang, *Decolonising Medieval Fennoscandia* (see note 37), 101.

⁵⁵ Christine E. Fell, “Some Questions of Language,” *Two Voyagers at the Court of King Alfred. The Ventures of Ohthere and Wulfstan together with the Description of Northern Europe from Old English Orosius*, ed. Niels Lund, trans. Christine E. Fell. With Contributory Essays by Ole Crumlin-Pedersen, P. H. Sawyer, and Christine E. Fell (York: William Sessions, 1984), 56–64; here 57. On this, see also Valtonen, *The North in the Old English Orosius* (see note 10), 291.

⁵⁶ A subtribe of the *Finnas*, the so-called Ter Saami, probably living or, at least, associated with the southeast Kola Peninsula. The ethnonym *Terfinnas* only occurs in Ohthere’s sea travel account, which informs us that they had the same habits of the *Finnas*, such as fishing and hunting, but they spoke a language very close and similar to the *Beormas*’ one. On this, see Valtonen, “Who were the *Finnas*?” (see note 37), 106, and Valtonen, *The North in the Old English Orosius* (see note 10), 383–84. For the identification of the *Terfinnas* with the *Tyrfjinnar*, who are mentioned in the *Ævindrápa* from *Qrvar-Odds Saga* see Wang, *Decolonising Medieval Fennoscandia* (see note 37), 137–38.

⁵⁷ Bately, *The Old English Orosius* (see note 13), 14/20–26.

Uninhabited regions as well as temporary settlements are associated with the idea of wasteland and wilderness. This idea is stressed by the use of the term *weste* ‘desert, waste, uncultivated and uninhabited,’⁵⁸ which generally occurs in Anglo-Saxon literature as referred to desert lands in biblical and hagiographical texts.⁵⁹ Even in the *Old English Orosius*, the word *weste* occurs in the section dealing with Africa as referred to the Ethiopian desert,⁶⁰ whereas in Ohthere’s account it is strictly connected to the territories where *Finnas* temporary camp. The idea of a landscape which is still natural and wild is confirmed by the geographical depiction of Norway⁶¹ based on the opposition between arable and non-arable territories:

He sæde ðæt Norðmanna land wære swyðe lang 7 swyðe smæl. Eal þæt his man aþer oþþe ettan oþþe erian mæg, þæt lið wið ða sæ; 7 þæt is þeah on sumum stowum swyðe cludig, 7 licgað wilde moras wið eastan 7 wið uppon, emnlange þæm bynum lande. On þæm morum eardiað Finnas.⁶²

[He said that the land of Northmen was very long and very small [= narrow]. All [of the land] that can be grazed or plowed lies by the sea; and even this is in some places very rocky, and there lie wild moors⁶³ to the east and above, alongside the inhabited land. On the moors live the *Finnas*].

And once again, the idea of an environment, which apparently is not completely subordinate to humans, is associated with the *Finnas*, i.e., with temporary settlers as well as with their lifestyle based on fishing and hunting.

These two human approaches to nature are reflected by a different land use as well as by a different use of animals. As already said, Ohthere possessed farm animals; nevertheless, his wealth mostly depended on wild animals:

58 On this, see Bosworth, *An Anglo-Saxon Dictionary Online* (see note 50), <https://bosworthtoller.com/35445>. On the description of the northernmost parts of Norway as uninhabited and desolate regions, which conflicts with that of other medieval sources describing them as inhabited, see Wang, *Decolonising Medieval Fennoscandia* (see note 37), 119–49.

59 On this, see Estes, *Anglo-Saxon Literary Landscapes* (see note 2), 17.

60 On this, see Godden, *The Old English History of the World* (see note 9), 432.

61 The depiction, better, the idea of Norway as a wild land also occurs in the later poetic travelogue poem “Von meiner mervart” (‘On My Sea Travel’) composed by the German poet Michel Beheim (1416 or 1421–ca. 1475); on this, see Classen, “Traveling to/in the North” (see note 43), 307.

62 Bately, *The Old English Orosius* (see note 13), 15/21–25.

63 Christine E. Fell translates *moras* as ‘mountains’; on this, see Lund, Fell, *Two Voyagers at the Court of King Alfred* (see note 34), 20. Indeed, Old English *mor* can mean both ‘moor and damp land’ and ‘high waste ground, mountain’ (see Bosworth, *An Anglo-Saxon Dictionary Online* (see note 50), <https://bosworthtoller.com/23123>). On this, see also Valtonen, *The North in the Old English Orosius* (see note 10), 329–30.

He wæs swyðe spedig man on þæm æhtum þe heora speda on beoð, þæt is on wildrum. He hæfde þagyt, ða he þone cyningc sohte, tamra deora unbebohra syx hund. Ða deor hi hatað hranas; þara wæron syx stælhranas, ða beoð swyðe dyre mid Finnum, for ðæm hy foð þa wildan hranas mid.⁶⁴

[He was a very wealthy man in those possessions that their wealth consists of, that is, in wild animals. He still had, when he visited the king, six hundred unsold tamed deer. They call those deer ‘reindeer’; six of them were decoy reindeer, these are very prized among the *Finns*, as they catch the wild reindeer with them].

In his report Ohthere, who was not a reindeer owner, rather a mediator in transactions between reindeer owners, the *Finns*, and reindeer consumers, the Northmen,⁶⁵ makes a distinction between wild and domesticated reindeer.

This statement is important in order to ascertain whether at his time reindeer could be related to hunting or to herding activities. In this respect, Ohthere’s account has been considered as a reference which corroborates the thesis of a phase of transition “from wild reindeer hunting to regulated breeding of tamed animals.”⁶⁶ This means that at his time reindeer were not only hunted, but also bred, at least in some of the areas settled by the *Finns*,⁶⁷ who prized *stælhranas*. These could be bell or lead reindeer used in order to gather and lead the herd, or decoy reindeer, as for example milk animals, used in order to capture and to ‘integrate’ young animals in the herds of tamed reindeer.⁶⁸ The use of decoy confirms the knowledge of breeding by the *Finns*, although it can be also connected with hunting activities.⁶⁹

From a more specific ecocritical perspective, Ohthere’s report can be read in light of the question what the impact of hunting and/or herding activities on the environment might have been at that time. Regarding this, paleo-ecological investigations can be helpful. Archeological sites in the Sami area of Sweden as well as in Norwegian-Swedish highlands attest the existence of a specific kind of buildings, the so-called *stállo* foundations, i.e., a sort of dwelling with a sunken floor surrounded by a earthwork and with a hearth in the middle,⁷⁰ located along the

64 Bately, *The Old English Orosius* (see note 13), 15/7–11.

65 Inger Storli, “Ohthere and his World – A Contemporary Perspective. With a Note by Else Roesdahl,” *Ohthere’s Voyages. A Late 9th-Century Account* (see note 12), 76–99; here 95.

66 Ian Whitaker, “Ohthere’s Account Reconsidered,” *Arctic Anthropology* 18/1 (1981): 1–11; here 8. On this, see also Wang, *Decolonising Medieval Fennoscandia* (see note 37), 117.

67 On this, see Whitaker, “Ohthere’s Account Reconsidered” (see note 66), 5.

68 On this, see Storli, “Ohthere and his World” (see note 65), 94.

69 On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 297–98.

70 On this, see Ingela Bergman, Olle Zackrisson, Lars Liedgren, “From Hunting to Herding: Land Use, Ecosystem Processes, and Social Transformation among Sami AD 800–1500,” *Arctic Anthropology* 50.2 (2013): 25–39; here 27; Kjell-Ake Aronsson, “The Function of Stállo Foundations in the

Scandinavian mountain ridge, which were in use in the period of Ohthere's visit to King Alfred, that is, in a period dating from the mid-ninth century to the mid-eleventh century, or even earlier, in a period dating from the mid-seventh century to the mid-twelfth century.⁷¹

Stállo sites have been alternatively considered as reindeer hunters' camps, although no remains of hunting equipment or reindeer bones have been found, or as reindeer herder's settlements,⁷² and it has been long suggested that they were used as temporary dwellings especially during the summer. Nevertheless, more recently it has been proposed that this kind of hut was also used throughout the year, so even in winter.⁷³ As *stállo* foundations were generally built from birch and birch bark, their impact on the environment has been long debated. Even if recent paleo-ecological investigations have questioned the human impact on forest and on ground vegetation at the time of *stállo* foundations,⁷⁴ the studies of Ingela Bergman, Olle Zackrisson, and Lars Liedgren have highlighted how the intensive use of birch wood for fuel and for wooden constructions led to a depletion of wood resources and to a human-induced environmental transformation.⁷⁵ In other words, *stállo* foundations have been seen as the main cause of an anthropogenic deforestation, especially in the areas close to the border between Sweden and Norway, e.g., in Adamvållda Valley.

In addition to this particular depiction of different land uses, Ohthere's report is also important as literary witness of the relationship between humans and nature, i.e., animals, during the mid-ninth century. In fact, the text informs that another source for his fortune was the payment of tributes paid by the *Finnas*, which consisted in animal skins, bird feathers, whale's bone, and ship's ropes⁷⁶:

Scandinavian Mountain Ridge Reconsidered," *Currents of Saami Pasts. Recent Advances in Saami Archaeology*, ed. Marte Spangen, Anna-Kaisa Salmi, Tiina Äikäs, Markus Fjellström. Monographs of the Archaeological Society of Finland, 9 (Helsinki: Archaeological Society of Finland, 2020), 94–103; here 94.

71 On this, see Aronsson, "The Function of Stállo Foundations" (see note 70), 94.

72 On this, see Aronsson, "The Function of Stállo Foundations" (see note 70), 95.

73 On this, see Bergman, Zackrisson, Liedgren, "From Hunting to Herding" (see note 70), 28; Aronsson, "The Function of Stállo Foundations" (see note 70), 96. See also see Valtonen, *The North in the Old English Orosius* (see note 10), 297.

74 On this, see Aronsson, "The Function of Stállo Foundations" (see note 70), 96–99.

75 On this, see Bergman, Zackrisson, Liedgren, "From Hunting to Herding" (see note 70), 32–34; Lars Östlund, Greger Hörnberg, Thomas H. DeLuca, Lars Liedgren, Peder Wikström, Olle Zackrisson, Torbjörn Josefsson, "Intensive Land Use in the Swedish Mountains between AD 800 and 1200 led to deforestation and ecosystem transformation with long-lasting effects," *Ambio* 44.6 (2015): 508–20; here 514–16.

76 On this, see also Classen, "Traveling to/in the North" (see note 43), 308, and Wang, *Decolonising Medieval Fennoscandia* (see note 37), 152–53 and 163–67.

Ac hyra ar is mæst on þæm gafole þe ða Finnas him gylðað. Þæt gafol bið on deora fellum 7 on fugela feðerum 7 hwales bane 7 on þæm sciprapum þe beoð of hwæles hyde geworht 7 of seoles. Æghwilt gylt be hys gebyrdum: se byrdesta sceall gyldan fiftyne mearðes fell 7 fif hranes 7 an beran fel 7 tyn ambra feðra 7 berenne kyrtel oððe yterenne 7 twegen sciprapas; ægþer sy syxtig elna lang: oþer sy of hwæles hyde geworht, oþer of soles.⁷⁷

[But their wealth is mostly in the tribute that the *Finnas* pay them. That tribute consists of the skin of animals, and of the feathers of birds, and whale bone, and of those ship's ropes which are made from the hide of whale [i.e., of walrus?] and of the seal. Each pays according to his birth's rank: the highest in birth's rank has to pay fifty marten's skins, and five reindeer's and one bear's skin, and ten measures of feathers, and a kirtle made of bearskin or otterskin, and two ship's ropes; each of them must be sixty ells long, one of them made of hide of whale [i.e., of walrus?], the other from seal].

The reference to *hwales bane* 'whalebone' is very significant, as ivory was the second reason, or, maybe, the main reason why Ohthere decided to travel northward:

Swiþost he for ðider, toeacan þæs landes sceawunge, for þæm horshwælum, for ðæm hie habbað swiþe æpele ban on hiora topum – þa teð hie brohton sume þæm cyninge – 7 hiora hyd bið swiðe god to sciprapum. Se hwæl bið micle læssa þonne oðre hwalas: ne bið he lengra ðonne syfan elna lang; ac on his agnum lande is se betsta hwælhuntað: þa beoð eahta 7 feowertiges elna lange 7 þa mæstan fiftiges elna lange; þara he sæde þæt he syxa sum of sloge syxtig on twam dagum.⁷⁸

[He mainly went there, apart from exploring the land, for the walruses, for they have very fine bone in their tusks – they brought some of the tusks to the king – and for their hide is very good for ship's ropes. This whale [= walrus] is much smaller than other whales: it is no longer than seven ells long; but in his own land it is the best whale hunting: they are forty-eight ells long, and the biggest fifty ells long; he said that he, one of six [or, one of seven],⁷⁹ killed sixty in two days].

From a historical point of view, these two short passages give a glimpse of the importance of Scandinavian regions for the export and trade of exotic goods, such as marten's, bear's, and otter's furs, reindeer's skin, seal's hide, feathers.⁸⁰ A sought-after commodity was then whale and/or walrus ivory, which became very

77 Bately, *The Old English Orosius* (see note 13), 15/14–20.

78 Bately, *The Old English Orosius* (see note 13), 14/30–15/6.

79 Old English *syxa sum* can mean both 'one of six' and 'one plus six'. On this, see Bately, "Translation Notes. With Two Notes by E. G. Stanley" (see note 27), 58.

80 On this, see P. H. Sawyer, "Ohthere and Viking Age Trade," *Two Voyagers at the Court of King Alfred. The Ventures of Ohthere and Wulfstan together with the Description of Northern Europe from Old English Orosius*, ed. Niels Lund, trans. Christine E. Fell. With contributory essays by Ole Crumlin-Pedersen, P. H. Sawyer, Christine E. Fell (York: William Sessions, 1984), 43–55; here 43. On this, see also Classen, "Traveling to/in the North" (see note 43), 288. In order to satisfy the constant Norse demand for furs, hunting, which represented the main Saami subsistence strategy

popular when elephant tusks became rare to obtain, and which was especially used for small carved objects, such as panels of small boxes, and belt buckles.⁸¹

In any case, both excerpts are especially interesting if read through ecocritical lenses, as they witness not only the systematic use of earth mammals (bears, reindeer, martens) for economic purposes, but mostly the long-term exploitation of sea mammals.⁸²

In this respect, it is not very clear what kind of sea mammals Ohthere is really referring to; in fact, he first reports that walrus are prized for the ivory of their tusks and for their hide, which is used for ship's ropes; but then he informs his audience about a two-days long whale hunting, during which sixty whales were killed by him together with his companions, which seems "scarcely credible."⁸³ Of course, whales were hunted during the Viking Age from Northmen and even from the *Finnas*, as we can infer from the list of tributes paid by them, which included whale bone and ropes made of whale hide. The number of sixty whales killed in just two days can seem surprising, nevertheless, it has been suggested that Ohthere was here referring to a specific whale, i.e., to the Biscay right whale (*Balaena glacialis*), which could reach the length of fifteen or sixteen meters, and which was almost pacific and so easy to hunt, or to other minor whales, as, for example, porpoise or white whales.⁸⁴

Another possible explication for this excerpt is that most probably Ohthere was here using the term *hwæl* 'whale' referring to walrus. In fact, this mammal was unfamiliar to his Anglo-Saxon audience, as we can infer from Ohthere's description of its size ("Se hwæl bið micle læssa þonne oðre hwalas" [This whale is much smaller than other whales]), as well as from the particular compound he uses to name it, i.e., *hors-hwæl* 'horse-whale':⁸⁵ according to this explanation the hunting of sixty walrus (instead of sixty whales) in two days seems quite possible.⁸⁶ Moreover, walrus have been hunted in northern Norway until the nineteenth century.⁸⁷

during the Early Middle Ages, became a "large-scale industrial organization" (Wang, *Decolonising Medieval Fennoscandia* [see note 37], 107).

81 On this, see Sawyer, "Ohthere and Viking Age Trade" (see note 80), 44, and Else Roesdahl, "Walrus Ivory," *Ohthere's Voyages. A Late 9th-Century Account* (see note 12), 92.

82 On this, see Storli, "Ohthere and his World" (see note 65), 91.

83 Whitaker, "Ohthere's Account Reconsidered" (see note 66), 5.

84 On this, see Bately, "Translation Notes. With Two Notes by E. G. Stanley" (see note 27), 57, and Storli, "Ohthere and his World" (see note 65), 90.

85 On this, see Fell, "Some Questions of Language" (see note 55), 58; Valtonen, *The North in the Old English Orosius* (see note 10), 305.

86 On this, see Valtonen, *The North in the Old English Orosius* (see note 10), 309.

87 On this, see Storli, "Ohthere and his World" (see note 65), 91.

Consequently, even the ship's ropes made from whale hide included in the list of tributes could be actually made from walrus hide; moreover, walrus ropes were considered stronger than other kinds of rope and were in use in northern Norway until the eighties of the twentieth century.⁸⁸ Hence, Ohthere's report does not only confirm how sea mammals were important in northern trade and economies, but it also shows and proves how long they have been exploited.

Conclusion

Ohthere's voyage account is one of the main literary sources on the geography of Northern Europe and it can be considered as the first depiction not only of the Scandinavian landscape, but also as one of the first ethnographical description of the peoples living in the northern regions, of their different kinds of settlement, their ways of living, their habits, including their land use and their approach to environment. Regarding this, the text repeatedly highlights, even from a lexical point of view, the difference between rural and agricultural landscapes with permanent settlements, on the one hand, and waste and wild landscapes with temporary camps, on the other, as well as it points out how the northern economies was based on hunting of animals, such as reindeer, martens, otters, bears, and sea mammals.

Therefore, an environmental and an ecocritical re-reading of Ohthere's travel report represents an important literary proof of situations with long-lasting effects, as, for instance, the depletion of wood resources and the exploitation of animals, and it confirms that dramatic present-day conditions and situations, such as deforestation or extinction of animal species, can be considered as the results of a concept of nature as something subordinate to human activities and needs that has always been.

⁸⁸ On this, see Sawyer, "Ohthere and Viking Age Trade" (see note 80), 54.

Wendy Pfeffer

When Is a Good Time? Health Advice and the Months of the Year

Abstract: This article is an introduction of the *Diététique provençale* or *Conselhs occitans de santat*, a thirteenth-century Occitan verse text offering advice on the topics of health and diet, and a demonstration of its ties to Latin works including the *Secretum secretorum* or *Secret of Secrets*, *Letter of Hippocrates*, and *regimina XII mensum*. The *regimina* texts spell out, month by month, what to eat and what to do medically according to a calendar of the months; the *Diététique* translates this advice for its Occitan audience. The analysis will illustrate how medieval medicine was deeply in tune with the cycles of nature, embracing the timing of the natural world as a critical foundation for medical treatment.

Keywords: *Diététique provençale*, diet calendars, *regimina XII mensum*, Occitan health advice, *Conselhs occitans de santat*, medieval medicine, *Letter of Hippocrates*

Introduction

This article demonstrates the ties between the *Diététique provençale*, a thirteenth-century Occitan didactic work on the topic of health and diet, and Latin works called, among a surfeit of titles, *Regimina XII [duodecim] mensium*. These Latin works serve as a focus for this article because they use the months and seasons of the year as a guide for health advice. The seasons and months are elements of a large natural world – the rotation of the moon around the earth and the rotation of the earth around the sun. Though medieval readers of these works in Latin and Occitan did not know that lunar and planetary movement are responsible for months and seasons, any medieval individual was very aware of the passage of time marked by the apparent motion of objects in the sky. We thus face an excellent opportunity to comprehend more in depth the intimate relationship between practical and theoretical medicine on the one hand and the close study of all forces in nature on the other.

I am currently creating a new edition of the *Diététique*, which I am hoping to rename as *Occitan Health Advice* or *Conselhs occitans de santat*. My work with this verse text has led me in a host of interesting directions, including the world

of medieval medicine and medical training in medieval Occitania, the southern part of today's France.

Secretum secretorum or Secret of Secrets

Occitan Health Advice has long been considered an Occitan example of the *Secretum secretorum* tradition; the *Secretum* or *Secret of Secrets* is a text so widely copied that Lynn Thorndike described it as “the most popular book in the Middle Ages.”¹ The *Secretum secretorum* is, itself, a Latin translation of a tenth-century work written in Arabic, the *Sirr-al-asrar*, purporting to be a letter of advice written to Alexander the Great by Aristotle.²

The transmission of this Arabic work to the Latin world is somewhat complicated. A first, very incomplete translation of the original Arabic text into Latin prose was done by John of Seville in the first half of the twelfth century (John flourished between 1109–1143)³; John gave his work a new title: *De Regimine sanitatis* or the *Epistola Aristotilis ad Alexandrum de dieta servanda*. His work falls in

1 Lynn Thorndike attributes the line to M. Gaster in *Magic and Experimental Science* (New York: Columbia University Press and The Macmillan Co., 1923), vol 1, 267. I have the sense that absolutely everyone has to include this Thorndike quotation in their works. See Ilaria Zamuner “Per l'edizione critica dei volgarizzamenti provenzali dell'‘*Epistola ad Alexandrum de dieta servanda*,’ Scène, évolution, sort de la langue et de la littérature d'oc: Actes du Septième Congrès international de l'Association internatinaline d'études occitanes, Reggio Calabria-Messina, 7–13 juillet 2002, ed. Rossana Castano, Saverio Guida, and Fortunata Latella (Rome: Viella, 2003), 739–59; here 739n. Steven J. Williams identified 73 manuscripts of John of Seville's translation, dating from the twelfth to the fourteenth centuries, see *The Secret of Secrets: The Scholarly Career of a Pseudo-Aristotelian Text in the Latin Middle Ages* (Ann Arbor, MI: University of Michigan Press, 2003), 368–88. Françoise Viel-liard reports 150 manuscripts (“Les traductions des repertoires dans la littérature médiévale occitane,” *L'Occitan, une langue du travail et de la vie quotidienne du XIIe au XXIe siècle: Les traductions et les termes techniques en langue d'oc, Actes du colloque organisé à Limoges les 23 et 24 mai 2008 par le Centre Trobar et l'EA 4116* (Ussel: Musée du Pays d'Ussel / Centre trobar, 2009), 223–37; here 228. Ilaria Zamuner offers a detailed history of the *Secretum* in the Romance language world in “La tradizione romanza del *Secretum secretorum* pseudo-aristotelico. Regesto delle versioni e dei manoscritti,” *Studi Medievali*, 3rd series, 46 (2005): 31–116.

2 Catherine Gaullier-Bougassas, Margaret Bridges, and Jean-Yves Tilliette, “Cheminements culturels et métamorphoses d'un texte aussi célèbre qu'énigmatique,” *Trajectoires européennes du Secretum secretorum du Pseudo-Aristote (XIIIe–XVIe siècle)*, ed. Catherine Gaullier-Bougassas, Margaret Bridges, and Jean-Yves Tilliette. Alexander Redivivus 6 (Turnhout: Brepols, 2015), I, 5–25; here 12; *Translations médiévales: Cinq siècles de traductions en français au Moyen Âge (XIe–XVe siècles), étude et répertoire*, ed. Claudio Galderisi. 2 vols. in 3 tomes. (Turnhout: Brepols, 2011), vol. 2.2, 1251–52.

3 Zamuner, “Per l'edizione critica” (see note 1), 742–43; Hugo Bizzari, “E. Le *Secretum secretorum*,” *La fascination pour Alexandre le Grand dans les littératures européennes (Xe–XVIe siècle)*,

the genre of advice to princes.⁴ John of Seville's translation is known in the scholarly literature as the "short form" of the *Secretum secretorum*.⁵ As Steven Williams noted with regard to John's effort, "the story of its *fortuna* is a complicated one" that has not yet been recounted.⁶

A second and more complete translation from Arabic to Latin was done by Philip of Tripoli in the thirteenth century. This second translation, known as the "long form" of the *Secretum secretorum*,⁷ was widely copied and translated into multiple vernaculars over the next few centuries, though not into Occitan.⁸ Philip of Tripoli's translation, a longer text in the genre of medicine and/or of magic, has received much more scholarly attention than that of John of Seville.

There appear to be a number of translations into vernacular languages of John of Seville's text: several fragments and two complete translations into Old French,⁹ as well as the lines included in *Occitan Health Advice* and its fragments. Ilaria Zamuner also identified Italian translations, in multiple manuscripts.¹⁰

ed. Catherine Gaullier-Bougassas. T. 1. *Réinventions d'un mythe*. Alexander Redivivus, 6 (Turnhout: Brepols, 2014), 44–45; here 44.

4 This text was described by Hermann Suchier, ed., *Denkmäler provenzalischer Literatur und Sprache zum ersten Male herausgegeben* (Halle a. d. S.: Max Niemeyer, 1883), 531. Marilyn Nicoud calls it a treatise on hygiene rather than a medical text, *Les Régimes de santé au Moyen Âge: Naissance et diffusion d'une écriture médicale (XIIIe–XVe siècle)*. 2 vols. Bibliothèque des Écoles françaises d'Athènes et de Rome, 333 (Rome: École française de Rome, 2007), 958, and does not really include the *Diététique* in her study.

5 John's work is often referenced by the letters SS/A; see inter alia, *Translations médiévales*, ed. Galderisi (see note 2), vol. 2.2, 1252.

6 Steven J. Williams, "The Vernacular Tradition of the Pseudo-Aristotelian *Secret of Secrets* in the Middle Ages: Translations, Manuscripts, Readers," *Filosofia in volgare nel Medioevo: Atti del Convegno della Società italiana per lo studio del pensiero medievale (S. I. S. P. M.)*, Lecce, 27–29 settembre 2002, ed. Nadia Bray and Loris Sturlese. Textes et études du Moyen Âge, 21 (Louvain-la-Neuve: Fédération Internationale des Instituts d'Études Médiévales, 2003), 451–82; here 469.

7 Referenced by the letters SS/B.

8 See Williams, "The Vernacular Tradition of the Pseudo-Aristotelian *Secret of Secrets* in the Middle Ages" (see note 6), 469–82; Viellard, "Les traductions des classiques" (see note 1), 228; *Translations médiévales*, ed. Galderisi (see note 2), vol. 2.2, 1252.

9 For a detailed discussion of this tradition, see Ilaria Zamuner, "Les versions françaises de l'*Epistola ad Alexandrum de dieta servanda*: mise au point," *La Traduction vers le moyen français. Actes du IIe colloque de l'AIEMF [Association internationale pour l'étude du moyen français]*, Poitiers, 27–29 avril, 2006, ed. Claudio Galderisi and Cinzia Pignatelli (Turnhout: Brepols, 2007), 165–87.

10 Zamuner, "Per l'edizione critica dei volgarizzamenti provenzali dell'*Epistola ad Alexandrum de dieta servanda*" (see note 1), 744; Ilaria Zamuner, "Una versione veneziana dell'*Epistola ad Alexandrum de dieta servanda*," "Qui fruit ne sap collir": *Homenatge a Lola Badia*, ed. Anna Alberni, Lluís Cifuentes, Joan Santanach and Albert Soler (Barcelona: Edicions de la Universitat de Barcelona, 2021), vol. 2: 347–364, and *Translations médiévales*, ed. Galderisi (see note 2) vol. 2.2, 1253–54.

The *Secret of Secrets*, in its fullest, consists of ten books¹¹:

Preface

1. On the Kinds of Kings
2. On the Position and Character of a King
3. On Justice
4. On Ministers
5. On Scribes
6. On Ambassadors
7. On Governors
8. On Army Officers
9. On the Conduct of War
10. On the Occult Sciences

Within Book 2, “On the Position and Character of a King,” the section on health covers¹²:

1. An introduction to the section
2. Practical recommendations on hygiene, food/drink, exercise/rest; the four seasons
3. The four parts of the body
4. Diet (preserving natural heat; healthy foods; meat and fish)
5. Water
6. Wine
7. The bath
8. Panacea
9. Medical astrology

John of Seville truncates these nine sections to four, a significant change¹³; he presents:

1. An introduction with an explanation of the translation sequence (Greek to Arabic to Latin)
2. Recommendations on hygiene, food and drink, exercise and rest.
3. The Four Seasons
4. Preserving Natural Heat

¹¹ Williams, *The Secret of Secrets* (see note 1), 10–11.

¹² Williams, *The Secret of Secrets* (see note 1), 10.

¹³ As published by Johannes Brinckmann, they make up 213 lines in total, see *Die apokryphen Gesundheitsregeln des Aristoteles für Alexander den Grossen in der Übersetzung des Johann von Toledo*. Inaugural-Dissertation. Institut für Geschichte der Medizin zu Leipzig (Leipzig: Metzger & Wittig, 1914), 39–46; as published by Suchier, they make up 231 lines in total (*Denkmäler provenzalischer Literatur und Sprache* [see note 4], 473–80).

While nominally a translation of John of Seville's *Epistola*, the *Occitan Health Advice* can be summarized in this fashion:

1. Introduction (ll. 1–43)
2. Starting the day: practical recommendations on hygiene (ll. 44–124)
3. Morning Activities (ll. 125–54)
4. Midday Meal (ll. 155–216)
5. Afternoon Activities, including a nap (ll. 217–62)
6. The Four Seasons (ll. 263–348)
7. Twelve Months of the Year (ll. 349–411)
8. Conclusion (ll. 413–84)

While the *Occitan Health Advice* does include some elements of the *Secret of Secrets* tradition, the anonymous vernacular author added others, as the chart below makes clear.

Table 1: Comparison of the *Epistola Aristotilis ad Alexandrum* and the *Conselhs occitans de santat*.

John of Seville's <i>Epistola</i>	<i>Conselhs occitans de santat</i>
Introduction	Introduction
Recommendations on hygiene, food and drink, exercise and rest.	Starting the day: practical recommendations on hygiene morning activities midday meal afternoon activities, including a nap
The four seasons	The four seasons
Preserving Natural Heat	
	Twelve months of the year
	Conclusion

***Regimina duodecim mensium*, Monthly Diet Calendars**

Another very important source for *Occitan Health Advice* is the genre known as *regimina duodecim mensium*, what I call “advice by the months.”¹⁴ “Advice-by-the-months” is a subgenre of Latin advice literature, a kind of “diet calendar”: rela-

¹⁴ Ilaria Zamuner alluded to this connection but did not develop the argument; see Zamuner, “Les versions françaises de l'*Epistola ad Alexandrum de dieta servanda*: mise au point” (see note 9), 172.

tively short prose texts organized by the months of the year, offering health advice. These works may not yet have been examined in full,¹⁵ though the texts are numerous in medieval manuscripts, particularly of the eleventh and twelfth centuries.¹⁶ Tracing the origins of this material is complicated; scholars are not in agreement as to initial sources or medieval routes of transmission.¹⁷ Recent scholarship on these works suggests a diffusion out of Insular monasteries in the eighth century (Benedict Biscop [ca. 628–690] and Bede the Venerable [672–735]

15 Klaus-Dietrich Fischer names the many medical historians who have ignored these works in “Gesund durchs Jahr mit Dr. Hippokrates – Monat für Monat!” *The Frontiers of Ancient Science. Essays in Honor of Heinrich von Staden*, ed. Brooke Holmes and Klaus-Dietrich Fischer with the assistance of Emilio Capettini. Beiträge zur Altertumskunde, 338 (Berlin and Boston: Walter de Gruyter, 2015), 111–37; here 112 n3; Fischer also points to Guy Sabbah, Pierre-Paul Corsetti, and Klaus-Dietrich Fischer, eds., *Bibliographie des textes médicaux latins: antiquité et haut moyen âge* (BTML). Preface by Mirko D. Grmek. Centre Jean-Palmerne, mémoires, 6 (Saint-Étienne: Publications de l’Université de Saint-Étienne, 1987), no. 82, and cites Frank-Dieter Groenke, “Die frühmittelalterlichen lateinischen Monatskalendarien. Text – Übersetzung – Kommentar,” Ph.D. diss., Berlin: Institut für Geschichte der Medizin der Freien Universität Berlin, 1986.

16 Groenke identifies 70 different witnesses which he divides into 9 types in his “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15).

17 Jean Barbaud proposed that the source of these works was Pseudo-Soranus, a turn-of-the-sixth-century author in “Les anciens calendriers diététiques,” *Revue d’histoire de la pharmacie* 76 (1988): 328–43; here 332. http://www.persee.fr/doc/pharm_0035-2349_1988_num_76_279_3000 (last accessed on Sept. 23, 2023); see also Jean Barbaud, “Les boissons dans les calendriers diététiques,” *Bulletin de liaison de l’Association des Amis du Musée de la Pharmacie de Montpellier* 11 (1986): 15–26; here 21. A different individual, Soranus of Ephesus, would have his name associated with a work published in the Renaissance with the title *Isagoge in artem medendi*, an *Introduction to the Art of Healing* (see Klaus-Dietrich Fischer, “The ‘Isagoge’ of Pseudo-Soranus: An Analysis of the Contents of a Medieval Introduction to the Art of Medicine,” *Medizinhistorisches Journal* 35 (2000): 3–30, <https://www.jstor.org/stable/25805250> (last accessed on Sept. 23, 2023). Fischer argues that the elements of the Renaissance *Isagoge*, printed in 1528, may have circulated independently, many of them anonymously, prior to their being assembled into a single volume attributed to a single author, Soranus (Fischer, “The *Isagoge*,” 7–8 and 20). Johanna Maria van Winter traces the origin of these texts to fourth-century physician Theodorus Priscianus whose work was later combined with elements of the *Secretum secretorum*, which included a section on diet according to the seasons (van Winter, “*Regimina sanitatis* by Month and by Season,” *Food and Meals at Cultural Crossroads. Proceedings of the 17th Conference of the International Commission for Ethnological Food Research, Oslo, Norway, September 15–19, 2008*, ed. Patricia Lysaght [Oslo: Novus Press, 2010], 98–109; here 108). See also Monica H. Green, “Recovering ‘Ancient’ Gynaecology: The Humanist Rediscovery of the Eleventh-Century Gynaecological Corpus,” *Transmission of Knowledge in the Late Middle Ages and the Renaissance*, ed. Outi Merisalo, Miika Kuha, and Susanna Niiranen. Bibliologia, 53 (Turnhout: Brepols, 2019), 45–54, for a description of a similar assembly process used in Renaissance publication of medieval gynecological texts.

are implicated in the transmission of these *regimina*)¹⁸ though Johanna van Winter suggests Salerno as another source¹⁹; Franz-Dieter Groenke points to Ravenna.²⁰ These calendars carry various titles, including *Regimina XII mensium* and *Medicina Ypocratis quid usitare debeatur per singulos menses*.²¹

Letter of Hippocrates

We need to add to the list of potential sources for the Occitan text a letter from renowned Greek physician Hippocrates of Kos (ca. 460–ca. 370 B.C.E.) to Antiochus (fl. 4th century B.C.E.), which was freely adapted into a letter to Maecenas (ca. 70–8 B.C.E.),²² the *Epistula ad Maecenatem*, in which we find a health calendar. Based on dates alone, it is clear that the letter to Maecenas must be a pseudo-Hippocratic text.²³

18 Barbaud, “Les boissons dans les calendriers diététiques” (see note 17), 21. Bede is invoked in Groenke’s Type V, incipit “Observatio mensium secundum Bedam,” “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15), 210.

19 Van Winter, “*Regimina sanitatis* by Month and by Season” (see note 17), 108.

20 Groenke, “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15), 278.

21 Fischer, “The *Isagoge*” (see note 17), 10; Zamuner, “Les versions françaises” (see note 9), 172. *Medicina Ypocratis* . . . is the title used in British Library Harley manuscript 3271, f. 122v. The Bibliothèque nationale de France uses the title “Liber de minucione et medicina secundum variationes lunarum,” found in thirteenth-century manuscript BnF lat. 10448, f. 122r, see <https://gallica.bnf.fr/ark:/12148/btv1b9066069t/f123.item#> (last accessed on Sept. 23, 2023). Beccaria uses “calendario dietetico” to describe these texts; he identified some fifteen witnesses, with varying incipits, in manuscripts from the ninth through the eleventh century, a number which suggests that the work was well known in that period. See Augusto Beccaria, *I codici di medicina del periodo presalernitano (secoli IX, X e XI)* (Rome: Edizioni di storia e letteratura, 1956), 443, <http://elea.unisa.it:8080/xmlui/handle/10556/2329> (last accessed on Sept. 23, 2023); Lynn Thorndike and Pearl Kibre add to Beccaria’s list in *A Catalogue of Mediaeval Scientific Writings in Latin*, rev. and aug. ed. (Cambridge, MA: Medieval Academy of America, 1963) <https://hdl-handle-net.proxy.library.upenn.edu/2027/heb31355.0001.001> (last accessed on Sept. 23, 2023). Groenke created nine categories of these texts; for his group IIa, he counted no fewer than 26 examples (see Fischer, “Gesund durchs Jahr” [see note 15], 117, citing Groenke, “Die frühmittelalterlichen lateinischen Monatskalendarien” [see note 15], 45).

22 Charles Talbot states that there were two letters that circulated under the name of Hippocrates that were conflated into one, “Medico-Historical Introduction,” Charles H. Talbot and Franz Unterkircher, *Medicina antiqua: Libri quattuor medicinae, Codex Vindobonensis 95 der österreichischen Bibliothek* (Graz: Akademische Druck- und Verlagsanstalt, 1972), 27.

23 See *Bibliographie des textes médicaux latins*, ed. Sabbah, Corsetti, and Fischer, (see note 15), 99–100.

In addition, a multitude of vernacular medical texts carried the idea of a letter from Hippocrates forward; many of these are called the *Letter from Hippocrates to Caesar*, accurately described by Tony Hunt as “a somewhat amorphous treatise . . . which has attracted the name ‘Lettre d’Hippocrate’ as a critical convenience.”²⁴ Six manuscripts have been identified as including a copy of the Occitan *Lo libre que Ipocras trames a Cesar*,²⁵ though these witnesses include pharmaceutical recipe collections rather than discussions of more general health matters.

Despite the uncertainties that remain as to the origins of medieval diet calendars, what is clear today is that there were, at a minimum, two distinct *regimina* tied to the calendar, one according to the seasons and a second according to the months of the year.²⁶ Johanna Van Winter observes,

[I]n the month-based regimens the medical aspect dominated and in the seasonal regimens it was the culinary one which was emphasized; the medical aspect of the month-based rules was especially directed towards bodily purging.²⁷

Whether by month or by season, these *regimina* outline good health habits for the entire year; some monthly versions start the year in January, others in March.²⁸ Van Winter distinguishes between those that advise absinthe in May and those that recommend absinthe for April.²⁹ These *regimina* are frequently inserted into other medical works.

These diet calendars have succeeded in concealing themselves from the modern reader and cataloguer³⁰; they are hiding in medical texts in libraries in Eu-

24 *Old French Medical Texts*, ed. Tony Hunt, Textes littéraires du Moyen Âge, 1 (Paris: Classiques Garnier, 2011), 17.

25 See the *Dictionnaire des Termes Médico-botaniques de l’Ancien Occitan (DitMAO)*, <https://www.uni-goettingen.de/en/487591.html> (last accessed on Sept. 23, 2023).

26 Groenke distinguishes nine different variations of the monthly calendars in his “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15). One could argue that his Type VI, for which he presents two witnesses (219–23), both from the same manuscript, Vatican Library Reginensis Latinus 1143, is more a seasonal regimen than a monthly guide.

27 Van Winter, “*Regimina sanitatis*” (see note 17), 108.

28 Montpellier manuscript H 185 offers an example of each of these types, Groenke’s Type I, which begins with January, on f. 160 r–v; his Type III, which begins with March, on f. 161 r–v; see Groenke, “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15), 97 and 167.

29 Van Winter, “*Regimina sanitatis*” (see note 17), 101; Groenke’s Type I and Type III offer examples of this difference in prescription.

30 Online descriptions of Montpellier Bibliothèque interuniversitaire Section de Médecine H 185 offer incomplete lists of contents, in which this text does not appear. See <http://www.calames.abes.fr/pub/#details?id=D01041157> (last accessed on Sept. 23, 2023), which picks up information from the library’s own catalog, <https://ged.biu-montpellier.fr/florabium/jsp/portal/index.jsp?suc>

rope and North America today.³¹ Important for *Occitan Health Advice* is that two distinct monthly calendars³² are found in a codex (Montpellier, Bibliothèque interuniversitaire Section de Médecine H 185) that was held in a monastery near Avignon in the fourteenth century,³³ a confirmation that this month-by-month method of presentation of medical information was available in Occitania at the time of composition of the *Conselhs occitans*.

Occitan Health Advice, the *Conselhs occitans de santat* or *Diététique provençale*

I turn now to my text, *Occitan Health Advice* or, in Occitan, the *Conselhs occitans de santat* (a work dubbed the *Diététique provençale* by its first editor, Hermann Suchier). At some point in the thirteenth century, an anonymous Occitan author used John of Seville's work as the basis for a work of his own, which begins "Qui vol auzir un bon tractat." I do not think we can call the Occitan advice a translation of John of Seville, though large sections of the Latin work do have parallels in the Occitan text.³⁴ Ilaria Zamuner has demonstrated, however, that the Occitan text's introductory lines are very different from their suggested Latin source.³⁵ Moreover, the discussions of bloodletting in the *Occitan Health Advice* are not found in John of Seville's text. The month-by-month presentation of advice (ll. 349–412) probably finds its model in the short Latin prose works known as *Regimina XII [duodecim] mensium*, just discussed.³⁶ The following chart shows

cess=%2Fjsp%2Fportal%2Findex.jsp&profile=anonymous (last accessed on Sept. 23, 2023). The calendars are hiding under item 16, *Antidotarium*. The Jonas online database offers a minimal description and no contents: <http://jonas.irht.cnrs.fr/manuscrit/36219> (last accessed on Sept. 23, 2023). Groenke catalogues one of these as his type I ("Die frühmittelalterlichen lateinischen Monatskalendarien" [see note 15], 21), the other as his type III (167).

31 See Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 21, 45, 76, 80, 91–95.

32 Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), distinguishes these calendars as examples of his Type I (f. 160 r–v) and Type III (f. 161 r–v).

33 Though the manuscript dates from the eleventh century, folio 1r bears the phrase "Iste liber est monasterii sancti Andree dyocesis Avinionensis" in a fourteenth-century hand. For a discussion of how the manuscript may have arrived in Montpellier, see [Pierre] Pansier, "Étude sur un manuscrit médical du XIe siècle," *Mémoires de l'Académie de Vaucluse* 2nd ser. 7 (1907): 115–22; here 116, and <http://www.calames.abes.fr/pub/#details?id=D01041157> (last accessed on Sept. 23, 2023).

34 See Suchier, *Denkmäler provenzalischer Literatur* (see note 4), 531.

35 Zamuner, "Les versions françaises" (see note 9), 173–76.

36 See van Winter, "*Regimina sanitatis*" (see note 17), *passim*.

some of the correspondences between the advice in Occitan and these Latin *regimina*. The parallels could be complicated by the variety of versions of the Latin texts,³⁷ so I use only one manuscript, Montpellier Bibliothèque interuniversitaire, Section de Médecine H 185, f. 160 r–v, for the comparison that follows.

Table 2: Advice Parallels between Occitan and Latin Texts.

	<i>Occitan Health Advice's language</i> ³⁸		<i>Regimen XII mensium advice</i>
January	Do not blood let in January,	l. 349	do not do phlebotomy ³⁹
February	Do not eat chard in February,	l. 350	
March	In March you do not want to let blood, Nor do cauterization, nor cupping. If then you have no great need	l. 351	do not do phlebotomy ⁴⁰

³⁷ This is the title used in British Library Harley manuscript 3271, f. 122v. The Bibliothèque nationale de France uses the title “Liber de minucione et medicina secundum variationes lunarum,” found in thirteenth-century manuscript BnF lat. 10448, f. 122r, see <https://gallica.bnf.fr/ark:/12148/btv1b9066069t/f123.item#> (last accessed on Sept. 23, 2023). Beccaria calls this text a “calendario dietetico”; he identifies some fifteen versions of this text, with varying incipits, in manuscripts from the ninth through the eleventh century, numbers which suggest that the work was well known in that period, see Beccaria, *I codici di medicina* (see note 21), 443; Thorndike and Kibre, *A Catalogue of Incipits* (see note 21) add to Beccaria’s list. For a discussion of these relatively unstudied texts, see Jean Barbaud and Pierre Gillon, “Cinq calendriers diététiques provenant de manuscrits de la Bibliothèque nationale de Paris,” *Actes, XXXe Congrès international d’histoire de la médecine, Düsseldorf 31.VIII–5.IX 1986*, ed. Hans Schadowaldt (Düsseldorf: Organisationskomitee des XXX. Internationalen Kongresses, 1988), 179–87. Groenke’s “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15) is the first attempt to present a critical edition of the various versions of these monthly calendars; he counts 70 of them, divided into 9 distinct types. Note also Zamuner, “Les versions françaises” (see note 9), 172.

³⁸ Translation from Wendy Pfeffer, *Medieval Diet and Medicine: Occitan Health Advice for the Layperson* (Berlin: Walter de Gruyter, forthcoming).

³⁹ Fischer, “Gesund durchs Jahr” (see note 15), 116; Barbaud’s example advises against bloodletting more generally, in the wintertime, Barbaud, “Les anciens calendriers” (see note 17), 336.

⁴⁰ Barbaud, “Les anciens calendriers” (see note 17), 335; Fischer, “Gesund durchs Jahr” (see note 15), 115; Montpellier l. 13 (Groenke’s Type I); Groenke, “Die frühmittelalterlichen lateinischen Monatskalendarien” (see note 15), 100.

Table 2 (continued)

	<i>Occitan Health Advice's language</i>	<i>Regimen XII mensium advice</i>
	For reason of illness [You will not want to consume], Lentils or to eat sweet things. Know that rue ⁴³ would be good if you can drink it.	I. 355 avoid sweet things ⁴¹ drink rue ⁴²
April	In April, one must avoid Eating all root [vegetables], But it is good medicine to blood let him who needs it.	I. 360 do not eat root [vegetables] ⁴⁴
May	In May, one must not eat the head Of anything, nor is it a good [time] for blood letting, But in this month, it makes good sense To consume fennel or absinthe	I. 365 eat the head of no animal ⁴⁵ ; consume absinthe ^{46,47}
June	In June one must often eat Lettuce, and one must consume Vinegar and all sour fruits At the table, when one is hungry.	I. 370 eat lettuce ⁴⁸ drink vinegar ⁴⁹

⁴¹ Fischer, "Gesund durchs Jahr" (see note 15) 116.

⁴² Montpellier I. 15 (Groenke's Type I); Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 100.

⁴³ One Montpellier version (Groenke's Type I) also recommends rue for the month of July, lines 40–41; see Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 108. I use Groenke's editions of these calendars in what follows.

⁴⁴ Montpellier I. 20 (Groenke's Type I); Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 102.

⁴⁵ Van Winter sees the prohibition on eating animal heads as stemming from Galen, "*Regimina sanitatis* by Month and by Season" (see note 17), 107. One Montpellier version, (Groenke's Type I) adds that one should avoid the feet of animals as well, at its lines 27–28; see Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 104.

⁴⁶ Barbaud, "Les anciens calendriers" (see note 17), 335; absinthe is more often recommended for the month of May, Barbaud, "Les boissons" (see note 17), 22. See Montpellier I. 22 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 102.

⁴⁷ See van Winter, "*Regimina sanitatis* by Month and by Season" (see note 17), 106.

⁴⁸ Fischer, "Gesund durchs Jahr" (see note 15) 116; see Montpellier I. 32 (Groenke's Type I); Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 106.

⁴⁹ Fischer, "Gesund durchs Jahr" (see note 15), 117 and Montpellier I. 32 (Groenke's Type I); Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 106.

Table 2 (continued)

	<i>Occitan Health Advice's language</i>	<i>Regimen XII mensium advice</i>
July	In July it's not good to be bled Nor to take medicine nor give it; As for ladies, it makes sense Not to kiss them too often.	l. 371 do not do phlebotomy ⁵⁰ abstain from coitus, ⁵¹
August	In August, he who is wise is careful To eat, above all other things, Things that the blood can mix And that do not create black bile, But, rather, light and comforting things: fresh meat, good breads And sauces of mint and of pennyroyal. These are of great benefit. In this month one must not buy Beef or pork for eating.	l. 375 avoid foods that generate black bile ⁵² l. 380 drink pennyroyal ⁵³
September	September is so lovely That it must make everyone joyful. For it does no man ill, If he has not been taken [ill] in August. Then one can eat without harm, All foods, better than in any other month of the year.	l. 385 l. 389 eat what you want, ⁵⁴

50 Barbaud, "Les anciens calendriers" (see note 17), 336; Fischer, "Gesund durchs Jahr" (see note 15), 119; Montpellier ll. 37–38 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 108.

51 Barbaud, "Les anciens calendriers" (see note 17), 336; Montpellier l. 36 (Groenke's Type I); Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 106.

52 Montpellier ll. 43–44 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 108.

53 Montpellier l. 42 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 108; pennyroyal is recommended in the month of January in other diet calendars, Barbaud, "Les boissons" (see note 17), 22.

54 Barbaud, "Les anciens calendriers" (see note 17), 337; Fischer, "Gesund durchs Jahr" (see note 15), 116; Montpellier l. 49 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 110.

Table 2 (continued)

	<i>Occitan Health Advice's language</i>	<i>Regimen XII mensium advice</i>
	And it is good to take medicine And to drink cow's milk.	drink milk ⁵⁵
October	In October one must consume Sweet grapes, and one must press must. Of all the [months of] the year, an empanada is not as healthy [as now], if it is well prepared, And one must use in sauces Pepper, ginger and cloves.	consume grapes and must ⁵⁶ I. 395 consume pepper and cloves, ⁵⁷
November	In November do not bathe If you want to protect yourself But then are sufficiently beneficial bloodletting and cupping; and he is more skilled at composing, any man who wants to apply himself.	do not bathe ⁵⁸ I. 400
December	In December a man must keep from eating cabbage morning and night, For these can then generate suffering which makes a man scream. But in this month he is very wealthy Who uses lavender ⁵⁹ Often in his plate, And ginger, and very peppery [foods].	I. 405 I. 410 use pepper ⁶⁰

55 Barbaud, "Les anciens calendriers" (see note 17), 335 and 337. Montpellier ll. 47–48 (Groenke's Type I) specifically advises goat's or sheep's milk, Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 110.

56 Fischer, "Gesund durchs Jahr" (see note 15), 116; Montpellier l. 52 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 112.

57 Barbaud, "Les anciens calendriers" (see note 17), 335.

58 Montpellier l. 56 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 112.

59 Montpellier (Groenke's Type I) recommends parsley rather than lavender at line 62; Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 114.

60 Montpellier l. 62 (Groenke's Type I), Groenke, "Die frühmittelalterlichen lateinischen Monatskalendarien" (see note 15), 114.

This tabular presentation allows us to see clearly the incorporation into the Occitan text of specific counsels vis-à-vis food, drink, and phlebotomy, following one of the diet calendars found in the Montpellier manuscript with remarkable precision.

If we attempt to align this medieval advice with what we know about the natural world, we find not nearly as many correspondences as I would like. I offer these limited examples. The advice for February is comparatively limited, speaking only against chard (*bledas*, l. 350 in the Occitan, *Beta vulgaris*), a leafy vegetable generally consumed between late April and the first hard frost, so, logically, not in the month of February.⁶¹ Fennel (*Foeniculum vulgare*) is recommended for consumption in the month of May, though the fennel bulb is today harvested from August to November.⁶² Perhaps we must infer that the May recommendation is for dried fennel or for fennel seeds.

Eating lettuce (*Lactuca sativa*) in June has a horticultural logic, as the plant, seeded in the spring, would be ready for consumption in early summer, before it bolts (i.e., flowers). The Occitan text advises against consumption of beef and pork in August, a reasonable precaution in the Mediterranean area in a period when refrigeration was generally unavailable, and meat could easily spoil.⁶³ October is, of course, the season of grapes, when grapes left on the vine will sun dry into raisins.⁶⁴ December's recommended diet of lavender, ginger and peppery spices and avoidance of cabbage (*Brassica oleracea*) reminds us that cabbage was the foundation vegetable in the medieval diet⁶⁵ (I infer that the mentioned discomfort is intestinal gas⁶⁶). Lavender could grow easily in a medieval garden and then be dried for use throughout the year. Pepper and ginger were imported spices, expensive but readily found in markets in medieval Montpellier and surrounding cities.

61 Cf. "chard," <https://en.wikipedia.org/wiki/Chard> (last accessed on Sept. 23, 2023).

62 Cf. "fennel," <https://en.wikipedia.org/wiki/Fennel> (last accessed on Sept. 23, 2023).

63 Wikipedia suggests that meat spoilage can occur within a matter of hours or days, see "meat spoilage," https://en.wikipedia.org/wiki/Meat_spoilage (last accessed on Sept. 23, 2023).

64 Cf. "raisin," <https://en.wikipedia.org/wiki/Raisin> (last accessed on Sept. 23, 2023).

65 See Wendy Pfeffer, *Le Festin du troubadour: Nourriture, société et littérature en Occitanie, 1100–1500* (Cahors: La Louve, 2016), 63–64 and 195, citing Louis Stouff, *La Table provençale: Boire et manger en Provence à la fin du Moyen Âge* (Avignon: A. Barthélemy, 1996), 74; see also Melitta Weiss Adamson, *Food in Medieval Times*. Food through History (Westport, CT: Greenwood Press, 2004), 8.

66 See "Cabbage," subheading "Disadvantages," <https://en.wikipedia.org/wiki/Cabbage> (last accessed on Sept. 23, 2023). While it has been suggested that release of intestinal gas was unwelcome in medieval interiors, my sense is that these were generally so drafty that odors would quickly dissipate. The discomfort is to the patient, not to those nearby.

Conclusion

In sum, the *Occitan Health Advice* builds on the *Secretum Secretorum* tradition, incorporates a good deal of the *Regimen duodecim mensium*'s thinking and formatting, and adds detailed medical and/or health information from other sources, making the Occitan work both a medical and a dietary text. In fact, that the Occitan author “hid” a monthly calendar in his longer work follows the informal tradition of these *regimina*.⁶⁷ The number of close parallels between the Latin monthly diet calendar and *Occitan Health Advice* leads me to think that the anonymous Occitan author may have had access to a medical volume such as the codex now found in Montpellier and used for my comparison of texts, above. We know that that book was housed in Villeneuve-lès-Avignon in the fourteenth century, not far from what I believe was the region of origin of our author, in the area near Montpellier, Béziers, and Narbonne.⁶⁸

In our twenty-first-century world, where we work by artificial light whether it be day or night, where we have a multiplicity of ways to preserve, prepare, and present food, we can easily ignore nature, her seasons, and, specifically, the passage of the moon, the natural feature that divides time into months. While it may not be a conscious connection for us, advice based on a monthly calendar is inherently tied to the natural world. The *regimina* texts spell out, month by month, what to eat and what to do medically; the *Conselhs occitans de santat*, *Occitan Health Advice*, translates and interprets this counsel for its Occitan audience, offering laypeople of the late thirteenth and early fourteenth centuries access to information that had been limited, beforehand, to audiences fluent in Latin. As we have observed, medieval medical practitioners were remarkably aware of the impact of the natural environment on human health, an aspect which is now increasing in scientific recognition, consider the National Center for Complementary and Integrative Health or NCCIH, a relatively recent U.S. government agency that is part of the National Institutes of Health (NIH).

⁶⁷ See note 30 above.

⁶⁸ Villeneuve-lès-Avignon to Montpellier is 91 km on foot; Villeneuve-lès-Avignon to Béziers, 157 km; Villeneuve-lès-Avignon to Narbonne, 184 km; data from <https://fr.mappy.com/> (last accessed on Sept. 23, 2023). See also Pfeffer, *Medieval Diet and Medicine* (see note 38).

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Humans Serving Nature: Beekeeping and Bee Products in Piero de Crescenzi's *Ruralia commoda*

Abstract: Piero de Crescenzi's chapters on bees in *Ruralia commoda* (1307) emphasize observation, service, and health care for the hives maintained on the grounds of an agriculturally productive villa. His work was deeply influenced by Greco-Roman and Judeo-Christian understandings of nature that highlighted a divinely created earth meant for humans to manipulate and maintain. These chapters, however, idealize a *custos* who served the bees rather than manipulating them for human benefit. The essay reveals respect for a culturally revered insect species

Keywords: Piero de Crescenzi, agriculture, bees, wax, divine creator, Genesis, Virgil

Introduction

Medieval agricultural writers inherited multiple understandings of nature from their sources. Many Greco-Roman philosophers and agriculturalists, which medieval authors read and quoted, shared an understanding of nature with two levels of expression. First, they shared a belief that nature was designed and made by a divine Creator. For these thinkers, nature was made for man, a rational being, to contemplate and imitate the divine Creator. Within this divine creation, each animal and plant was given a structure that best expressed its individual nature.¹ Structures did not form in response to plant or animal needs in their environments, but instead reflected an innate created nature.² Medieval agricultural writers also inherited a Judeo-Christian concept of divinely created nature. The book of Genesis presented earthly creation as under human management, even after humans had been expelled from the Garden of Eden.

¹ Roger French, *Ancient Natural History: Histories of Nature* (London: Routledge, 1994), 15–45.

² Clarence Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley, CA: University of California Press, 1967), 49–51. French, *Ancient Natural History* (see note 1), 46–48.

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Secondly, philosophers, encyclopedists, and agriculturalists in both traditions argued that the divine creator made nothing superfluous. Each being had an individual nature and purpose, even if that purpose was not immediately clear to humans. Many authors adhering to a sense of divine creation singled out insects as one of the divine Creator's least understandable creations. Some writers highlighted their short lifespans, wondering why they existed at all. Other writers struggled to explain why a creation designed for humans would include such voracious competitors for the same crops.

The exception for all of these authors, however, was the bee. Bees were highly respected in ancient and medieval culture as hardworking, organized producers of useful substances. While honey and wax were important agricultural products, these bee products also had a special place in medieval religious and medical cultures. The famous depictions of bees in the *Exultet Rolls* produced in Italy between the tenth and twelfth centuries, for example, celebrate bees' production of the substance from which the Easter candle was made.³ Beeswax was considered especially pure because it was believed to be made by beings that reproduced without sexual intercourse.⁴ In this way it was a product that could represent Christ in the well-known use of candles as standing for Christ's body (wax), soul (wick), and divine nature (flame).⁵ In medical texts, honey was the binding substance of electuaries, which were syrups that combined ingredients to aid the sick. Propolis, a dark brown resin now often called bee glue, was also considered an important medical product.⁶

3 Thomas Kelly, *The Exultet in Southern Italy* (Oxford: Oxford University Press, 1996.)

4 For an overview, see Catherine Vincent, *Fiat Lux: Lumière et luminaires dans la vie religieuse en Occident du XIIIe siècle au début du XVIe siècle* (Paris: Les Éditions du CERF, 2004), 68–70. Albertus Magnus, writing in the thirteenth century, considered multiple ways that bees reproduced, including sexually. See Albertus Magnus, *On Animals: A Medieval Summa Zoologica*, 2 vols., trans. Kenneth Kittell jr. and Irven Resnick (Columbus, OH: Ohio State University Press, 2018), 1263–72. Although Crescenzi cited Albertus Magnus in other sections of *Ruralia commodorum*, he did not include Albertus Magnus's consideration about bee sexual reproduction.

5 One of the best-known medieval references to this sense of candles comes from Jacobus Voragine, see Vincent, *Fiat Lux* (see note 4), 265. D. R. Dendy, *The Use of Lights in Christian Worship* (London: S.P.C.K., 1959.) Paul Fouracre, *Eternal Lights and Earthly Concerns: Belief and the Shaping of Medieval Society* (Manchester: Manchester University Press, 2021). Elisheva Baumgarten, "A Tale of a Christian Matron and Sabbath Candles: Religious Difference, Material Culture and Gender in Thirteenth-Century Germany," *Jewish Studies Quarterly* 20 (2013): 83–99; Noël Coulet, "Pour l'histoire de l'ex-voto: un prix-fait aixois de 1459," *Annales du Midi* 105. 203 (1993): 401–06.

6 For Varro, propolis was a more important medical material than honey. Varro, *De Re Rustica*, trans. William Davis Hooper (Cambridge, MA: Harvard University Press, 1960), book III, chapter xvi, 513.

By the fourteenth century, a tremendous demand for bee products, especially wax for candles, led to the importation of the substance into northern and southern European ports.⁷ High demand also meant that beekeeping could monetarily reward cultivators, even those with small amounts of land.⁸ Thus it is no surprise that beekeeping and collecting bee products appear in Piero de Crescenzi's *Ruralia commoda*, a twelve-book farming and animal husbandry text written in the early fourteenth century (ca. 1307). Crescenzi was aware of both the profitability of wax and its religious resonance. In the final section of his chapter on bees and beekeeping, titled "De omni utilitate apum," he states,

Faciunt etiam ceram, quae maxime necessaria est regibus et praelatis quibuscumque personis, ut notum est omnibus: quae satis magno pretio venditur et – quod amplius est – die noctuque honorem exhibet aeterno regni.

[Indeed, they make wax, which is extremely necessary to kings and prelates and people no matter their status, as it is known to everyone; which is sold for enough great reward and – what is more – by day and night it produces honor for the eternal king.⁹]

7 Carles Vela I Aulesa, *Especiers I Candelers a Barcelona a la Baixa Edat Mitjana: Testaments, Família, I Sociabilitat*, 2 vols. (Barcelona: Fundacio Noguera, 2007); Alexandra Sapoznik, "Bees in the Medieval Economy: Religious Observance and the Production, Trade, and Consumption of Wax in England, c. 1300–1555," *Economic History Review* 72.4 (2019): 1152–74; Lluís Sales I Favà, Alexandra Sapoznik, "Bees in the Medieval Maghreb: Wax, Honey and Cross-Cultural Trade in the Western Mediterranean," *Medieval Encounters*, 4–5 (2021): 434–55; and Lluís Sales I Favà, Alexandra Sapoznik, "The Production and Trade of Wax in North-Eastern Iberia, XIV–XVI c.: The Case of Catalonia," *New Approaches to the Archaeology of Beekeeping*, ed. David Wallace-Hare (Summertown, Oxford: Archaeopress Publishing Ltd., 2022), 172–85.

8 P. Rende, Francesca Laudani, Giulia Giunti, and Vincenzo Palmeri, "Calabrian Beekeeping," *Italian Apiculture: A Journey through History and Honey Diversity*, ed. Ignazio Floris (Florence: Accademia Nazionale Italiana de Entomologia, 2020), 218–23. The medieval beekeeping image in Rende et al's book chapter comes from an Italian copy of the *Tacuinum Sanitatis* held in the Bibliothèque Nationale-Paris. See Sophia Germanidou, "Medieval Beekeepers: Style, Clothing, Implements (Mid-11th–Mid-15th Century)," *Ethnoentomology* 3 (2018): 1–15. Lluís Sales I Favà, Alexandra Sapoznik, and Mark Whelan, "Beekeeping in Late Medieval Europe: A Survey of Its Ecological Settings and Social Impacts," *Anales de la Universidad de Alicante, Historia Medieval* 22 (2021): 275–96. Gene Kritsky, "Beekeeping from Antiquity through the Middle Ages," *Annual Review of Entomology* 62 (2017): 249–64. Sylvain Burri, "L'Apiculture dans les Massifs des Maures et l'Estérel à la Fin du Moyen Âge," *Provence Historique* 252 (2022): 449–74.

9 *Petrus de Crescentiis (Pier de' Crescenzi) Ruralia commoda: Das Wissen des vollkommenen Landwirts um 1300, Dritter Teil: Buch VII–XII*, ed. Will Richter (Heidelberg: Universitätsverlag C. Winter, 1998), 167.

In this statement, Crescenzi appears to be referring to the use of wax for candles, which as they burn can be a source of divine light.¹⁰ The kings and prelates he mentions made great gifts of wax to churches and shrines. In certain instances, wealthy, noble donors would even provide Easter candles as a gift to churches. Since these candles could weigh hundreds of pounds, the amounts of wax required suggest a healthy market for the substance.¹¹

Crescenzi's manual was a popular late medieval agricultural text.¹² But calling it an agricultural text is somewhat misleading. Crescenzi was a well-read legal professional, writing during his retirement from a successful and wide-ranging career.¹³ To supplement his own experience on the lands that he had owned, he gathered Roman texts, medieval theologians' and natural philosophers' writings, and medical treatises. His *Ruralia commoda* was written for audiences with different amounts of land – those with small plots, those with moderately sized *horti* or food-producing gardens, and those with large estates.¹⁴ But as a villa owner, Crescenzi's material for owners of large estates was perhaps the best developed. He presented the reader with a villa that produced the food an extended family needed while keeping those who lived at the villa healthy.

The beekeeping section appears in Book IX, which covers the acquiring, enclosing, and taming of animals.¹⁵ Book IX begins with horses in chapter 1, because of their nobility and great utility.¹⁶ It ends with bees in chapters 94–105. They do not appear to be last because they were considered least noble or useful, however. They appear to be grouped with other animals, like deer and certain birds, that remained semi-wild even when included on human managed lands. There-

10 Vincent, *Fiat Lux* (see note 4), 254.

11 Vincent, *Fiat Lux* (see note 4), 375–82. As Vincent points out, these candles were often decorated with the colors and coats of arms of those who donated them, reminding the faithful who provided them to the local church.

12 Johanna Bauman, "Life and Treatise," *Studies in the History of Gardens and Designed Landscapes* 22.2 (2002): 112–16. See also Johanna Bauman, "Piero de' Crescenzi's *Liber ruralium commodorum*: Unearthing the Origins of the Pleasure Garden," Ph.D. diss., University of Virginia, Charlottesville, 2000. For an introduction to the medieval French version of Crescenzi's text translated in 1350, see *Le Livre de Prouffitz Champestres et Ruraulx de Pierre de Crescens, Volume I: Introduction et texte (livres 1–VIII)*, ed. Fleur Vigneron (Paris: Honoré Champion Éditeur, 2023). See also Raffaella Fabiani Giannetto, *Medici Gardens: From Making to Design* (Philadelphia, PA: University of Pennsylvania Press, 2008), 89–92.

13 Richter, ed., *Ruralia commoda*, First Part (see note 9), 1.

14 Abigail Dowling, "All of these Things Truly Delight with Utility': Conceptions of Ecology and Environmental Manipulation in Pier de' Crescenzi's *Liber Ruralium Commodorum*", *Gardens & Landscapes of Portugal*. CHAIA/CHAM/Mediterranean Garden Society, 2 (May 2014): 70–77.

15 Richter, ed., *Ruralia commoda*. Third Part (see note 9), 25.

16 Richter, ed., *Ruralia commoda*. Third Part (see note 9), 28.

fore, they were only partially enclosed or tamed. The chapters on bees drew extensively on three well-known Roman agricultural texts, including Palladius's *Opus Agriculturae* (ca. 370 C.E.), Columella's *De re rustica* (ca. 64 C.E.), and Varro's *De re rustica* (ca. 30 B.C.E.).¹⁷ In this chapter, Crescenzi wove together excerpts from these three texts as well as sections of Virgil's *Georgics* (ca. 29 B.C.E.) which appeared in Columella's text.¹⁸ In a few places, Crescenzi compares the advice of these authors, but in most of the text he simply chooses from passages in the various works. He supplements these authors' work with his own observations and suggestions.

The practices and techniques that Crescenzi recommends reflect a medieval understanding of working with bees, shaped by the special status of bee products. This medieval understanding is unlike premodern "scientific beekeeping," which tended to praise human discoveries about bee behavior that allowed for manipulation of bees for human profit.¹⁹ Instead, Crescenzi, like earlier agricultural authors, explores the bees' needs, behavior, problems and preferences. He explains how humans can help bees be healthy and safe. Crescenzi does not emphasize the bees' products for human use, but instead highlights what humans can do for bees.

17 For an overview of Roman agricultural treatises, see Karl Butzer, "The Classical Tradition of Agronomic Science: Perspectives on Carolingian Agriculture and Agronomy," *Science in Western and Eastern Civilization in Carolingian Times*, ed. Paul Butzer and Dietrich Lohrmann (Basel: Birkhäuser Verlag, 1993), 540–51.

18 Crescenzi also mentions Menecrates once. See Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 152. Crescenzi did not use Albertus Magnus's section on beekeeping in *De animalibus*. See Albertus Magnus, *On Animals* (see note 4), 739–47.

19 Premodern scientific beekeeping practices emerged in the Scientific Revolution and into the nineteenth century. (These are different from modern scientific beekeeping practices.) This type of writing about bees can be seen in texts about and by Lorenzo Langstroth, who created the moveable frame hive in the 1840s. He is credited with discovering "bee space," which is space (about three-eighths of an inch) in the hive that bees use for movement (rather than comb). This allowed Langstroth to design a hive that had removable frames that bees would keep separate and that bees would not use propolis to seal. This hive, therefore, was easier for beekeepers to open and remove honey and wax. Much (though certainly not all) of his writing and scientific writing about bee behavior tends to emphasize increasing production of honey and wax and ease of removal for humans. Florence Naile, *The Life of Langstroth* (Ithaca, NY: Cornell University Press, 1942), 71–82.

Bees as Part of Nature

To understand Crescenzi's depiction of bees as part of nature, it is worthwhile to get a sense of both Greco-Roman and Judeo-Christian views, since Crescenzi built his chapters on the writings of Romans who were themselves deeply influenced by Greek and other pre-Christian understandings of nature, particularly in relation to insects and the surprisingly special subcategory of bees.

For both ancient and medieval views of nature, Clarence Glacken's foundational work, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century*, is a useful overview. He presents two main views of nature emerging in the Hellenistic world that shaped the attitudes of Columella, Varro, Palladius, and Virgil, from whom Crescenzi drew so heavily in his bee chapters. Many philosophers writing from the eighth to the first centuries B.C.E. envisioned a divine artisan who shaped chaotic matter into the earth to serve humans. Humans in turn served the divine artisan by contemplating nature and thereby that artisan.²⁰ Everything from the structure of the human hand, to the variety of foods in the world, to the winds that moderate heat and cold was made to help humankind contemplate and manipulate nature in imitation of the divine craftsman.²¹ This view is prominent in influential texts, including Aristotle's *Politics* (ca. 330 B.C.E.), Cicero's *De natura deorum* (ca. 45 B.C.E.), and Seneca's *Natural Questions* (ca. 62 C.E.), among many others.²²

In the philosophical view that things in nature are a construction for human use, most insects did not have a good reputation. Insects, like flies, wasps, and locusts irritated and injured people, sometimes without having an observable purpose. Ancient philosophers emphasizing a creation divinely produced for humans struggled to explain why a divine artisan would craft a nuisance.²³ Some underscored that everything in creation was in a constant process of generation,

20 The view of humanity's purpose as contemplating the Creator's power is particularly clear in *Hermetica*, Book III, 3b. For a translation, see Hermes Trismegistus, *Hermetica*, ed. and trans. Brian Copenhaver (Cambridge: Cambridge University Press, 1992), 13–14. But it is also clearly present in Cicero's influential *De natura deorum*. See Cicero, *De natura deorum*, trans. H. Rackham (Cambridge, MA: Harvard University Press, 1961).

21 See Glacken, *Traces on the Rhodian Shore* (see note 2), 46–62. For the structure of the human hand, see page 61.

22 For an analysis of Aristotle's understanding of nature, see French, *Ancient Natural History* (see note 1), 15–22.

23 French, *Ancient Natural History* (see note 1), 85. Insects were common example of natural philosophers, like Aristotle's student Theophrastus, who argued against the view of nature as created for people.

so things that seem to destroy are simply part of the generation process.²⁴ Other authors admitted that humans likely did not understand the role of insects in the divine artisan's order of nature.²⁵

Bees, however, had a special place in philosophical writing separate from other insects.²⁶ They produced honey, made complex homes, and lived in relatively orderly hierarchical groups – three attributes that made them beneficial to, and surprisingly similar to, humans and suggested they had a special relationship to the divine creator. This gave bees a unique status not just among insects, but among animals in general. For example, as Marie-Thérèse Zenner points out, for some Greek and Roman authors, honey replaced ambrosia after “Zeus usurped the place of his father Kronos,” causing a fall from a state of paradise.²⁷ Before the fall, ambrosia fell like dew from the trees in Summer and could be collected with little or no effort. After the Fall, bees became the producers of honey, which, while only a remnant of an earlier pre-fall food, was still imbued with divine status.²⁸ This view appears in Hesiod's *Theogony*, for example, when Zeus was nourished with honey and goat's milk.²⁹

This Fall and the importance of honey is clear in Virgil's *Georgics*, which uses honey to mark changes in food access after the Fall. Virgil's fourth and final chapter of the *Georgics* concerns bees, their behavior and attributes, products, and beekeeping. Virgil described them as fierce and noble – appropriate attributes for such a sophisticated being. But he went further. According to Virgil, “Esse apibus partem divinae mentis et haustus aetherios dixere” (bees received a share of divine intelligence, and a draught of heavenly aether) coming from god which imbues all things.³⁰ They also fly to the heavens into the stars like

24 Trismegistus, *Hermetica* (see note 20), 55–57.

25 Glacken, *Traces on the Rhodian Shore* (see note 2), 76. For a modern philosophical analysis of insects that draws mostly on views of insects from the eighteenth to the twenty-first centuries, see Jean-Marc Drouin, *A Philosophy of the Insect*, trans. Anne Trager (New York: Columbia University Press, 2019.) For a modern view of a similar issue, see Seiran Sumner, Georgia Law, and Alessandro Cini, “Why We Love Bees and Hate Wasps,” *Ecological Entomology* 43 (2018): 836–45.

26 For Aristotle's interest in the bee, see French, *Ancient Natural History* (see note 1), 68–69.

27 Marie-Thérèse Zenner, “From Divine Wisdom to Secret Knowledge: The Cosmology of the Honeybee in the Church Calendar,” *Micrologus* 8 (2000): 103–24. See page 108 for the quote. For further discussion of the fall from a golden age in agricultural and philosophic texts, see Glacken, *Traces on the Rhodian Shore* (see note 2), 130–33.

28 Zenner, “From Divine Wisdom to Secret Knowledge” (see note 27), 112.

29 Zenner, “From Divine Wisdom to Secret Knowledge” (see note 27), 109–110.

30 Virgil, ed. and trans. H. Rushton Fairclough (Cambridge, MA: Harvard University Press, 1965), 210–11.

human souls.³¹ While it is unclear if Crescenzi read Virgil's *Georgics* directly, it influenced Columella, whom he read and gathered passages from. Crescenzi's use of these ancient texts reinforced ancient notions that bees had a special place in divine creation.

Crescenzi also drew on medieval authors, whose views of nature were influenced by the Judeo-Christian views of creation, the human fall from paradise, and the later repopulation of the earth by Noah. These views also posit an earth created for humans and were influenced by, though they were certainly not identical to, Greek and Roman ideas. The Judeo-Christian Bible, particularly the Vulgate produced by St. Jerome in the fourth century, influenced Crescenzi and the medieval authors he cited.

The Vulgate begins with creation, though the books of Genesis and other passages in the Bible do not create one view of nature. In the first story of creation (Genesis 1–11), God did not order chaotic matter, but instead created everything in existence (the heavens and the earth) and then shaped the earth by creating both matter and time. (This view of creation is reinforced in the Book of Job, when the Lord describes his creations, reminding Job that humans did not create the earth.) Man's creation on the sixth day, after all other creation, presents his relationship to other living creatures and to God.³²

In the second story of creation, Adam was created from earth and God's breath before plants and animals were created. Adam was placed in the Garden of Eden "to till it and keep it" ("operaretur et custodiret illium").³³ The animals were put under his dominion and Eve aided him. Similar to the Greco-Roman fall, Adam and Eve's fall from God's grace and departure from paradise changed some aspects of their relationship to nature. On the one hand, they were separated from an ideal nature, which had required tilling and keeping, but not the sweat of labor that was required outside of Eden. On the other hand, other relationships did not change.

31 Virgil, Fairclough (see note 30), 212–13. Zenner explores this passage in Virgil and also traces the idea that the bee was able to lead human souls to the stars. See Zenner, "From Divine Wisdom to Secret Knowledge" (see note 27), 112–13.

32 For this assessment of Genesis, see Glacken, *Traces on the Rhodian Shore* (see note 2), 150–54.

33 Glacken, *Traces on the Rhodian Shore* (see note 2), 153. For the full text, see Genesis, 2:15, "tulit ergo Dominus Deus hominem et posuit eum in paradiso voluptatis ut operaretur et custodiret illium", Vulgate.org, accessed October 7, 2023, https://vulgate.org/ot/genesis_2.htm. There is a vast body of material discussing Genesis and Judeo-Christian commentary on it. For an overview and analysis see Jeremy Cohen, "Be Fertile and Increase, Fill the Earth and Master It,": *The Ancient and Medieval Career of a Biblical Text* (Ithaca, NY: Cornell University Press, 1989.)

Humans remained the steward of the earth, for example.³⁴ Glacken summarizes man's relationship to nature thus, "The theme that man, sinful though he be, occupies a position on earth comparable to that of God in the universe, as a personal possession, a realm of stewardship, has been one of the key ideas in the religious and philosophical thought of Western civilization regarding man's place in nature."³⁵ Similar to the Greco-Roman writings in which the earth was designed for humans in order to contemplate and imitate the divine artisan, Adam, who was made in God's image, has dominion over nature, which was created to help him.³⁶ And through nature, humans can learn about God.³⁷

Medieval authors were aware of Roman (and through them, Greek) arguments about nature. Of the two broad understandings of nature which emerged in late Roman thought, designed creation was, unsurprisingly, more influential to medieval writers. Bishop Isidore of Seville, writing in the seventh century, is a useful early medieval author to consider since his writings bridge Hellenistic and Christian ideas about nature and his works influenced many in western Christendom, including Crescenzi.³⁸

The *Etymologies* (ca. 630 C.E.) is perhaps Isidore's best known work. This was a philosophical grammar, expounding each word's etymological origin to provide insight into the essence of the thing represented by that word.³⁹ Isidore's *Etymologies* provides insight into insects in medieval views of nature. He described "tiny flying animals (de minutis volatibus)" by their actions and physical structures. In this broad category, he included many kinds of insects, starting with bees and mentioning wasps, gnats, and flies among others. Isidore's approach is similar to and particularly influenced by Pliny's encyclopedic efforts in his *Natural History*

34 For this assessment of Genesis, see Glacken, *Traces on the Rhodian Shore* (see note 2), 150–54. For an alternative view, see Cohen, "Be Fertile and Increase" (see note 33), 272–305, which argues that few medieval texts addressed the mastery or stewardship of the earth.

35 Glacken, *Traces on the Rhodian Shore* (see note 2), 155. For the impact of this view on environmental history, see Elspeth Whitney, "Lynn White, Jr.'s 'The Historical Roots of Our Ecological Crisis' after 50 Years," *History Compass* 13.8 (2015): 189–200.

36 Glacken, *Traces on the Rhodian Shore* (see note 2), 168.

37 Learning about God through nature emerged in St. Augustine's writings and continued to influence medieval theologians. *The Book of Nature in Antiquity and the Middle Ages*, ed. Arie Vanderjagt and Klaas Van Verkel. Groningen Studies in Cultural Change, 16 (Leuven: Peeters, 2005). Oskari Juurikkala, "The Two Books of God: The Metaphor of the Book of Nature in Augustine," *Augustinianum* 6.2 (2021): 479–98.

38 Butzer, "The Classical Tradition of Agronomic Science" (see note 17), 554–55. Crescenzi did not use writings by Isidore of Seville in the bee chapters of Book IX, but did use his texts elsewhere in *Ruralia commoda*.

39 Isidore of Seville: *On the Nature of Things*, ed. and trans. Calvin Kendall and Faith Wallis (Liverpool: Liverpool University Press, 2016), 8.

(c77 ce), which shared the idea that the natural world was designed for human use. Though Pliny did not develop these ideas as much as other scholars like Seneca, Pliny did indicate that bees were the most admired insects because they were created for human use.⁴⁰ Instead, like Aristotle, Pliny explored the nature of things in the form of “discrete, concrete facts about observable things in the world around him.”⁴¹ For Pliny, insects, small and intricate, were wonders of subtle artistry that allowed an observer to marvel at nature’s construction.⁴² Isidore shared this approach to a significant extent. Even the gnat, for example, was described in detail. It was called

Culex ab aculeo dictus, quod sanguinem sugit. Habet enim in ore fistulam in modum stimuli, qua carnem terebrat ut sanguinem bibat.

[*culex*, from ‘sting’ (*aculeus*) because it sucks blood, for which it has a tube in its mouth, like a needle, with which it pierces the flesh so that it may drink the blood.⁴³]

There is little indication of purpose for the gnat, though the Christian Isidore does indirectly suggest that some stinging flies reduce human pride.⁴⁴ Like Greek and Roman authors before him, however, bees had a special status in the category of “tiny flying animals.” Isidore praised bees’ building skills and described bees’ non-sexual procreation practices, including many ideas from Pliny and Virgil, though Isidore did not describe them flying to the stars.⁴⁵

⁴⁰ Audre Doody, “Literature of the World: Seneca’s Natural Questions and Pliny’s Natural History,” *A Companion to the Neronian Age*, ed. Emma Buckley and Martin Dinter (Oxford: Blackwell Publishing, 2013), 292. For Pliny’s attitude toward bees, see *Pliny, Natural History*, ed. and trans. H. Rackham (Cambridge, MA: Harvard University Press, 1956), 438–39.

⁴¹ Doody, “Literature of the World” (see note 40), 289. For Pliny’s attitudes towards nature, see French, *Ancient Natural History* (see note 1), 196–206. Pliny and Isidore did not have identical views of nature, however. See French, *Ancient Natural History* (see note 1), 199.

⁴² *Pliny, Natural History* (see note 40), 432–33.

⁴³ *The Etymologies of Isidore of Seville*, ed. Stephen Barney, W. J. Lewis, J. A. Beach, and Oliver Berghof (Cambridge: Cambridge University Press, 2006), 270. For the Latin, see *Isidori Hispalensis Episcopi, Etymologiarum sive originum*, ed. and trans. W. M. Lindsay (Oxford: Oxford University Press), 1957, book XII, chapter viii, 13.

⁴⁴ *The Etymologies* (see note 43), 270. Pliny also highlights drinking human blood as a property of many insects that might lead people to judge them harshly, but insisted that nature created nothing superfluous. *Pliny, Natural History* (see note 40), 434–35. Glacken, *Traces on the Rhodian Shore* (see note 2), 76.

⁴⁵ *The Etymologies of Isidore of Seville* (see note 43), 269. Isidore begins the section with an often quoted discussion of *apis* (bee) deriving from *pes* (feet), which describes bees as clinging to each other with their feet or perhaps being born without feet. For the change in bees’ access to the heavens, see Richard Dales, “The De-Animation of the Heavens in the Middle Ages,” *Journal of the History of Ideas* 41.4 (1980): 531–50.

Later medieval authors had an important place for honey, bees, and increasingly beeswax in their traditions. While honey was no longer considered the post-fall ambrosia, it retained its importance as a sweetener, preservative, and medicine. And medieval authors continued to be impressed with bees' complex structures and hierarchical communities. In the thirteenth century, Thomas of Cantimpré wrote *Bonum universale de apibus*, a text that used the hierarchical structure of bee communities to consider the ideal monastic community.⁴⁶ Also in the thirteenth century, Albertus Magnus discussed bees repeatedly in his *De animalibus*, even including a beekeeping treatise in the book.⁴⁷ Crescenzi was deeply influenced by Albertus Magnus, though did not take passages from *De animalibus* for his chapters on bees.

Bees' Needs and the Human *Custos*

As we have seen, many influential Greco-Roman authors viewed nature as created to help humans contemplate and imitate the divine creator. And Judeo-Christian authors understood animals as serving man. Considering these two approaches, Crescenzi's chapters on bees present a surprising set of bee/human relationships. In these chapters, the human *custos* clearly serves the bees, engaging in time-consuming, year-round tasks to keep bees fed, safe, and healthy.

While Crescenzi does consider bee products that humans use and the ways to improve and increase them, the bee-centric chapters of Book IX highlight the bees rather than their products. These chapters provide an observation of bees' desires and actions, depicting them, like Virgil did, as fierce, militaristic creatures, yet also playful and helpful. These chapters also emphasize bees' needs and urge keepers to construct special environments for bees, including quasi-wild spaces of flowing water, reeds, and stones. Crescenzi also instructed the caregiver for bees, whom he calls the *custos*, on moral and sexual behavior that would not offend and thereby drive the bees away.

While observation, service, and care of bees appear in every aspect of beekeeping for Crescenzi, this essay will consider four main elements of beekeeping: housing bees, care of the sick, the beekeeper's person, and producing honey and wax. In

⁴⁶ Thomas de Cantimpré, *Les Exemples du "Livre des Abeilles" Une Vision Médiévale*, ed. and trans. Henri Platelle (Turnhout: Brepols, 1997). Editor's note: see now Julia Burkhardt, *Von Bienen lernen: Das Bonum universale de apibus des Thomas von Cantimpré als Gemeinschaftsentwurf. Analyse, Edition, Übersetzung, Kommentar*. 2 vols. Klöster als Innovationslabore: Studien und Texte, 7 (Regensburg: Schnell & Steiner, 2022); see my review in *Mediaevistik* 35 (2022): 522–24.

⁴⁷ Albertus Magnus, *On Animals*, ed. Kenneth Kitchell and Irven Resnick (see note 4), 732–47.

terms of housing, beekeepers were expected to build enclosures for bee health and safety. Effective locations provided the proper landscape for food and water. Effective enclosures kept the bees comfortable, protected them from predators, and allowed for minimally invasive cleaning and removal of bee products for the life span of a particular hive. Beekeepers were also expected to care for sick and injured swarms, at times even caring for individual bees. Beekeepers carefully observed bee behavior and provided care outside and inside the hive. Crescenzi does include some human manipulation of the hive when he considers care, especially concerning competing leaders, and seasonal swarming. These manipulations are framed as keeping the hive healthy, however, more than helping the humans seeking bee products. Crescenzi also considers the lifestyle of the beekeeper, whether someone who works for the estate owner or the direct owner of the bees. Crescenzi discusses human behaviors and personal hygiene from the perspective of the bees. Finally, the chapters discussing procuring honey and wax present human needs, but also service to the divine, especially by producing wax for candles that will burn in churches.

Crescenzi's whole section on bees begins with two chapters on housing but returns to the topic in several other chapters as well. Since Crescenzi is writing in Bologna and using Mediterranean sources, his recommendations mostly reflect Mediterranean considerations of housing materials, landscape, and dangers. But it is not exclusive to the Mediterranean. Several housing issues reflect dangers that would be encountered anywhere, like theft and agricultural competitors.

Crescenzi begins chapter 94 with where to locate the bees' home (referred to by the terms *sedes* and *statio*) in relation to bee health, water and forage, and protection.⁴⁸ The overall message is that the keeper (*custos*) should not just pick a location convenient for humans but choose or even create a location that is best for the bees, and to a lesser extent, better for honey flavor.⁴⁹

Crescenzi incorporates information from three authors, including pointing out where their information overlaps or conflicts. Using both Palladius and Virgil, for example, he describes that the bees' home should be placed in a private, sunny part of the garden (*hortus*). Varro's information is more detailed about the temperature and exposure of this location, urging that the bees' home should not be placed anywhere that experiences fiery Summer heat or Winter shade. The beekeeper needs to observe where the sun rises in Winter and angle the bees'

48 I am consciously not conflating hive (*alvos*) and home (*sedes, statio, domicila*) in this essay. These were separate concepts for Crescenzi and required separate consideration.

49 Throughout this essay, I use the masculine pronoun for the beekeeper, since that is what Crescenzi uses. However, female beekeepers were not unknown after the thirteenth century. See Germanidou, "Medieval Beekeepers" (see note 4), 1–15.

home to face that.⁵⁰ The hive also needs to be located on the south side of large trees. The materials used to construct the bees' home should also help manage temperature.⁵¹ The authors Crescenzi cites recommend cork as the best material, though willow twigs, the hollow trunks of trees, and specific types of wooden planks will also work.⁵² Earthenware (used by Greek and Egyptian beekeepers in certain regions) reacts to temperature and should not be used. For bee health, their home should also be located in a place without echoing voices or oppressive odor from filth.⁵³

All three authors that Crescenzi paraphrases emphasize that the bees' home needs to be located near running water. They are quite specific about the nature of this water – it should be a clear, pure spring or a stream that forms shallow, moving pools “ita ut ne profunda sit ultra duos vel tres digitos” (that are not more than two or three fingers deep).⁵⁴ Crescenzi includes Varro's (and Virgil's) recommendation that the keeper should construct an environment for the bees by placing clay fragments and stones in the stream and lay sticks across the stream for the bees to sit on while they drink and warm their wings in the sun.⁵⁵ No mention is made of the *custos's* convenience in these sections. Instead, the assumption is that the bees' requirements will shape where their housing is located.

Bee fodder and forage concern all of the authors that Crescenzi paraphrases. Crescenzi includes lists of trees, shrubs, and flowers that should be near the bees' home. Crescenzi includes ten flowering herbs and plants from Columella and five

50 Crescenzi, *Ruralium commodorum* Third Part (see note 9), 146–47.

51 Since bees were semi-wild, they would leave if temperatures became unhealthy in the home provided by humans. Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 155.

52 Using wine barrels is mentioned in Rende, et al., “Calabrian Beekeeping” (see note 8), 218–23. A discussion of cork farming in the Iberian peninsula appears in Sales I Favà, et al., “Beekeeping in Late Medieval Europe” (see note 8), 275–96. In his translation of Palladius, John Fitch suggests “planks as in wine-making.” See Palladius, *The Work of Farming*, trans. John Fitch (Totnes: Prospect Books, 2013), 66. For the Latin see *Palladii Rutilii Tauri Aemiliani viri inlustris Opus agriculturae de veterinaria medicina de insitione*, ed. Robert Rodgers (Leipzig: Teubner, 1975), 43–44, “tabulis more cuparum.” For an array of medieval images of beehives, see Germanidou, “Medieval Beekeepers” (see note 4), 1–15. See also Burri, “L'Apiculture” (see note 8), 459–61. These sources also argue against using terra cotta vessels common in Greek agricultural literature and poetry. For example, see *On the Cave of the Nymphs in the Thirteenth Book of the Odyssey*, ed. and trans. Thomas Taylor (London: John M. Watkins, 1917), 5.

53 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 146.

54 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 152. This section does refer to water quality contributing to better honey.

55 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 146–52. For examples of documents describing bee hive sites that reflect this advice, see Sales I Favà, Sapoznik, and Whelan, “Beekeeping in Late Medieval Europe” (see note 8), 275–96.

more from Varro. Interestingly, Crescenzi's choices about which author to paraphrase overwhelmingly emphasize those who consider the bees' health. For example, Varro lists *cytisum*, which remains in flower from the Spring to the Autumn equinox and therefore is the most useful to bees.⁵⁶ Crescenzi, citing Varro, also describes thyme as the best plant for bee health.⁵⁷ Crescenzi chose not to include the passages from Palladius and Columella, even though both also recommend thyme. Their texts state that thyme creates the best tasting honey, emphasizing the product and human desires, rather than bee health.⁵⁸ This is not to say that Crescenzi ignores honey taste. He does include some of Palladius's discussion of which trees to remove from the bees' forage area because those trees cause the flavor of rustic, or woodland, honey. Crescenzi's choice of Varro as the main Roman agriculturalist to paraphrase results in this section highlighting bee health rather than honey flavor.

Finally, Crescenzi includes significant discussion of creating a home that protects the bees. He gathers information from all four authors that ultimately creates a diverse list of dangers that the keeper must consider. For example, the bees' home should be located in a place protected from winds that might hinder their ability to bring foraged food home. It should be protected from rain by being placed on a covered balcony. This balcony should be at least three feet high, and the keeper should make sure that the wall below the bees' home is very smooth so that frogs, lizards, and other climbing predators cannot enter the bees' home. The hive itself should be constructed with small openings also to deter lizards, though Crescenzi recognizes that the bees will also take care of this problem using propolis, if necessary, to close any gaps in the hive wall.⁵⁹

The bees' home should be located far from agricultural competitors like goats, which eat the flowers that bees need; cows, which disrupt the dew that bees drink; and birds, which eat the bees. If the keeper cannot restrict birds from using the location, he can use rattles to frighten them. The bees' home should be close to the estate owner's home to protect from theft by humans and attack by animals, including bears and mice.⁶⁰ In these sections, the humans' role is to predict danger and protect the bees' home and bodily safety.

⁵⁶ Crescenzi, *Ruralium commodorum*. Third Part, 151–52. This list is almost identical to Varro *On agriculture* book III, chapter xvi, ed. and trans. William Davis Hooper (Cambridge, MA: Harvard University Press, 1960,) 506–07. Hooper translates *cytisum* as snail clover.

⁵⁷ Crescenzi, *Ruralium commodorum*, 151–52. This list is almost identical to Varro's.

⁵⁸ For Palladius, see *Opus Agriculturae*, book 1, chapter 37 (see note 52). For Columella, see *De re rustica*, book 9, chapter 14.

⁵⁹ Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 154.

⁶⁰ There is significant evidence of theft in medieval legal sources. See Sales I Favà, Sapoznik, and Whelan, "Beekeeping in Late Medieval Europe" (see note 8), 275–96.

Throughout this discussion of how to site and build bee housing, Crescenzi keeps his focus on the bees' needs and perspective. There is some discussion of honey quality, but there is no discussion of the beekeeper's convenience or finding ways to make the bees adapt to human needs. There is a strong sense that not just any site will do. Temperature, water, forage, and protection all need to be considered for bees to thrive and it is the responsibility of the keeper to provide those. If those things are not provided, the bees will leave or suffer and the human is at fault. Bees might provide useful products but only in response to significant toil.

The proper site will promote bee health and safety, but Crescenzi has much more advice for promoting bee health and caring for bees when ill or injured. He includes health care advice and remedies for every creature in Book IX, and the bees are no exception. Crescenzi includes a description of what a healthy bee looks like and the best kind of bees. There were multiple honeybee species in the medieval Mediterranean, and this text shows awareness that not all bees are the same. In chapter 97, for example, which concerns buying distant bees and having them delivered to one's property, he states "In apibus optimae sunt parvae, variae, rotundae, ut ait Varro" (In bees, the best are small, parti-colored, and round, as Varro said.)⁶¹ In this chapter, Crescenzi also includes a brief overview of signs of a new swarm's health. The keeper should observe the bees' behavior and see if they are frequently in a swarm and if the work that they make is uniform and smooth. He should look at the individual bees to see if they are glossy. He should listen to them as well. A healthy swarm should make a buzz that is audible from a distance.

In the chapter titled "Concerning the troubles of bees and their cure," Crescenzi covers maladies and injuries that the keeper should be able to predict or observe, even though he cannot see inside the hive for part of the year. A few problems were easily observable. For example, when unseasonable rain or snow kept the bees from foraging, the keeper needed to provide food for the hive. Crescenzi, following Palladius, suggests providing figs or grapes boiled down and broken into lumps or providing vessels with honey-water with chunks of pure wool inside on which the bees could land and suck the honey water without falling in.⁶² Other problems required even more labor. A sudden hard rain or severe cold temperatures, for example, could overwhelm the bees. While this rarely killed them, it left them vulnerable on the ground, often far from their home. The keeper needed to collect the bees in a vessel, warm them with heated ashes, and, when possible, put them in the sun next to their hive so they could easily return to their home. This

61 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 149. Albertus Magnus categorizes bees as ringed creatures. Albertus Magnus, *On Animals* (see note 4), 436–37.

62 For an image of a beekeeper providing (most likely) food to hungry bees, see Germanidou, "Medieval Beekeepers" (see note 8), 7–9.

was time-consuming work for the keeper and had no impact on honey or wax quality. It was simply for the bees' health and avoiding loss of a hive.

Keepers also watched the behavior of bees outside the hive to determine the health of the community. One of the most significant problems a keeper had to watch out for was a hive with too many leaders, which caused groups of bees to fight and weakened the hive. Often the bees themselves killed the weaker leader, but if the hive became overly agitated, the keeper needed to spray honey-water or honey mixed with wine over the fighting bees. This caused them to stop fighting, start licking each other, and in the case of honey-wine, to become stupefied. When the bees kill the weaker king that king's followers would start following the stronger king.⁶³ This process required the keeper to have significant knowledge of bee behavior and remain observant over many days, especially in Spring and Summer.⁶⁴ The *custos* could not leave the bees' area for very long.

While the keeper could assess and treat problems by watching the bees outside the hive, at times, the keeper would have to open the hive to provide maintenance and care. In terms of maintenance, Crescenzi paraphrases Palladius's advice about opening the hive at certain times of year to clean and inspect it. Unlike the other three agricultural texts that Crescenzi cites, Palladius's text is organized by season, and the work of caring for bees by opening the hive was significantly seasonal. In Spring and Summer months, the keeper should lightly apply smoke to calm the bees in order to open the hive and remove dirt and expel vermin, such as moths.⁶⁵ In the Fall, the keeper should fumigate the hive with dried cow manure, which is suitable for the health of bees and provides purification.⁶⁶ The keeper should open the hive in early November to prepare it before sealing it up in the Winter. At this time, the keeper should clean the hive thoroughly. In places where it is too disruptive to use his hand, the keeper should clean the interior of the hive with the stiff feather of a large bird. After a thorough cleaning, the hive needed to be sealed in mud and cow dung for the Winter. Or if their home was on a balcony, the balcony openings needed to be covered in broom (a type of brushy plant) to protect them. The human labor here is significant, especially if an estate owned many hives.

⁶³ Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 154–55. Ancient and medieval authors understood hives to have a king. See Aristotle, *Historia animalium*, ed. and trans. D. Balme (Cambridge, MA: Harvard University Press, 1991), Book VIII (IX), 336–41.

⁶⁴ Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 146.

⁶⁵ Crescenzi includes a recipe for this smoke in the chapter concerning how to take honey from the bees. Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 163–64.

⁶⁶ Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 156. An image of applying smoke to a hive appears in Germanidou's text, though she assumes the figure is destroying the hive. See Germanidou, "Medieval Beekeepers" (see note 8), 11–13.

The problems created by moths help us see the *custos*'s labor for the bees. Crescenzi recognized moths as a particular problem, especially in April, when the hives had sat through the Winter. At this time of year, the keeper needed to open the hives and clean them thoroughly again, removing any honeycomb that the bees were not using or which had rotted. The keeper should use only the most delicate and sharpest iron tool in order not to disturb any other part of the hive.⁶⁷ The keeper should also remove any dirt, filth, or larvae of moths, which damage the honeycomb. Following Palladius, Crescenzi also provides a remedy for moth infestations which were a particular problem at that time of year. The keeper should place a deep copper vessel with a narrow opening among the hives. At dusk he should place a burning light in the bottom of the vessel. When the moths gather, attracted by the light and its reflections in the copper, they enter the narrow opening of the vessel, and are burned in the flame. All of these remedies, including this medieval bug zapper, required the *custos* to work both during the day and at night to aid the bees against predatory insects.

While moths were particularly problematic in April, Spring in general was a difficult time of year for the bees and therefore busy for the keeper. The keeper had to observe them carefully when he reopened the hive after Winter. The bees, weakened by fasting, might eat the wrong foods, such as spurge (*tithymalli*) and elm, which would loosen their bowels. The keeper needed to provide alternate foods, including pomegranate with dry wine and crushed seeds, until the correct foods were available. Crescenzi urged the keeper to consider how the bees looked and acted at this time because the problem might be more serious than simple hunger. If the keeper saw that their bodies were thin and bristly (rather than round and glossy) and if they frequently carried the bodies of dead bees from the hive, the keeper needed to provide a different remedy, one which included honey with crushed gall-nut or dried roses set out in a trough made from a reed.⁶⁸ There is no suggestion that hives should be destroyed to save human labor. Instead, great human labor is expended, especially in Fall and Spring months, to aid an insect.

At all times of the year, however, the keeper needed to watch carefully for serious illness in the hive. He needed to watch for changes in bees' color, undue thinness, or dullness as if from hunger. He needed to watch for changes in behavior such as hanging in the doorway or fighting *inside* their home. He needed to know the sounds of the hive, which Crescenzi uses the text of Virgil to describe. The hive should murmur like the woods in the South if it is healthy. But if it has a

67 The beekeeper's knife appears in multiple medieval images, see Germanidou, "Medieval Beekeepers" (see note 8), 1–15.

68 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 156.

heavy buzz or it hisses, like flowing waves of the sea or like a rapid fire burning in a closed furnace, the keeper needs to prepare the crushed gall-nut and roses medicine or a medicine of meat scraps, dried grapes, Athenian thyme, or aster mixed with fragrant wine and placed in baskets near the bees' door.

Throughout this section, Crescenzi describes the observant care the keeper should take of the bees' health. While there are some mentions made of the effect of this care on increased production of honey, the text primarily focuses on the seasonal difficulties that bees face and the careful ways that a keeper should aid the bees. The repeated descriptions of how bees look and act when encountering different problems, the concern even for individual bees struck by rain or cold, and the differing remedies for pests and illness all speak to the importance of humans serving the bees by maintaining hives and swarms for many years.

By describing the keeper's tasks, Crescenzi indirectly characterizes the ideal beekeeper and his behavior throughout the chapters. From the descriptions above of providing care, clearly the beekeeper needed to be an observant, patient person, who could pay attention to the ways bees looked, acted, and sounded. The keeper needed to have building skills or at least access to people with those skills. He needed to be knowledgeable about landscape, plants, and other animals.

But Crescenzi also includes specific traits and habits of person that a beekeeper needed. At the end of the chapter on the troubles of bees and their cures, for example, Crescenzi paraphrases Palladius's advice concerning the ideal beekeeper. "Haec omnia ceteraque efficiet custos castus et sobrius et alienus a balneis vel a cibis acribus et odoris immundi atque omnibus salsamentis." (In this and all other respects, the *custos* should practice chastity and sobriety and be a stranger to the baths and to bitter food and foul odors and all pickled fish⁶⁹). Following Palladius, Crescenzi says that avoiding sex and foul or bitter odors is particularly important when the hive swarms in the Summer.⁷⁰

69 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 156. This language is closest to Palladius, but Columella also specifies that the keeper should avoid sexual intercourse. Crescenzi assumes the reader understands why avoiding sexual intercourse is important. This may refer to odor, since it is grouped with odiferous activities. But it might also refer to the Christian understanding of wax as a pure substance, suggesting that the keeper should be chaste when interacting with the bees. The reference to baths here may reflect the reputation of public baths as brothels, and therefore not conducive to chastity, rather than a general admonishment not to bathe. For early medieval bathing, see Paolo Squatriti, *Water and Society in Early Medieval Italy, A.D. 400–1000* (Cambridge: Cambridge University Press, 1998), 44–65. For the linking of bath houses and odors, see Carole Rawcliffe, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge: The Boydell Press, 2013), 103–04.

70 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 159.

The keeper who wants to capture the swarm in a new hive, needs to be observant over many days as the bees take short trips away from the hive. The keeper should also have new hives prepared, assemble plants that delight the bees, and be careful not to repel the bees with one's odor when trying to get them to accept the new hive. In fact, the keeper should rub his hands with the sap of plants that attract bees.⁷¹ All of these actions of the beekeeper were meant to make this person appealing to bees. They have the practical purpose of allowing the keeper not to chase off the swarm he is trying to catch. But they also expect the keeper to know and conform to the bees' desires.

Only chapter 104, titled "Concering preparing honey and wax", highlights human labor for bee products rather than serving living bees. This section describes the labor required to extract all possible honey and wax from honeycombs. It gives detailed directions for cleaning, draining, and pressing honeycomb multiple times to extract as much honey as possible. The honey removed in the first pressing was the highest quality and easiest to procure. It may only have required suspension of the honeycomb over a basket or pressing with a weight. The second or third pressing might require squeezing the honeycomb in a canvas or linen sack suspended between two poles. The beekeeper could also gently heat the sack to loosen the honey before squeezing, though this honey could have a different quality and was called boiled honey.⁷²

Once the majority of honey had been removed, the wax was melted in a cooking pot with water and then squeezed in another canvas or linen sack to remove the water. Crescenzi described this process as making the wax beautiful as well as preparing it for long term storage. At this point, the wax could be sold to "kings and prelates and people no matter their status" for significant profit. In this way the bees' products, especially wax, would serve the divine through candles in churches and at public ceremonies. While this section did not focus on serving the bees, it highlighted the work required to take material from this exceptional creature. The special place of bees as part of nature and bees' particular behaviors made the honeys and pure wax they produced both lucrative and exceptionally useful. It rewarded the beekeeper's efforts with both money and a tribute to the divine.

71 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 161. Crescenzi's advice here evokes bees' food choices. Although not directly citing Aristotle, this knowledge appears as early as his *Historia Animalium*. Aristotle writes, "The bee alone [of all insects] settles on nothing rotten, nor does it take any food except what tastes sweet. Bees also take the most pleasant water for themselves wherever it springs up." See Aristotle, *History of Animals*, books VII–X (see note 63), 128–29.

72 Crescenzi, *Ruralium commodorum*. Third Part (see note 9), 161. I am grateful to Jon Snyder for his aid with the translation of chapter 104.

Conclusion

Crescenzi's chapters on bee husbandry were a microcosm of a healthy human relationship to the natural world. The rewards were great for beekeepers who served the bees. These chapters extol the virtues of observant and dutiful beekeepers, revealing Crescenzi's respect for the knowledge of those keepers. But disaster waited for slovenly keepers who served their own convenience, including the death of bees from predators or the escape of bees, which, as semi-wild creatures, could leave if treated poorly.

His chapters expose multiple senses of nature. On the one hand, he was aware of nature as designed for human use by a divine creator. His special consideration of beeswax shows a tangible sense of the divine. On the other hand, similar to writers like Isidore, Pliny, and Albertus Magnus, Crescenzi was particularly influenced by the consideration of the nature of things. He analyzed the attributes, behavior, and physical bodies of bees – their nature – closely in order to address their care.

The dutiful care and service that these chapters describe indicate the respect for an insect preceived as unique amongst its kind. Unlike other insects, which often harrassed humans or damaged their crops, the bee provided quasi divine substances. In the Judeo-Christian world Crescenzi inhabited, honey was the earthly memory of manna and wax was a substance pure enough to represent Christ. The bee was favored by God and served by people.

Albrecht Classen

Medieval Epistemology and the Perception of Nature: From the *Physiologus* to John of Garland and the *Niederrheinische Orientbericht*. *Bestiaries* and the 'Book of Nature'

Abstract: Postmodern readers tend to misunderstand most of medieval attempts to come to terms with nature, which was consistently viewed through allegorical lenses. Of course, in the daily context during the Middle Ages, nature was nature, and farmers and hunters, for instance, engaged with animals as they needed. Gardens and fields were set up and maintained, fishermen were regularly occupied, and woodcutters and foresters were busily at work in the forests. The philosophical and literary approach to nature, however, operated quite differently because animals and plants were all identified as the result of the Creator's work. Hence, the intellectuals' task was to gain a deeper understanding of the material dimension which certainly carried multiple meanings. This hence explains why so many medieval bestiaries and encyclopedias appear to represent reality in a rather imaginative manner and did not care about the accuracy of their observations. Only if we accept that the pre-modern age was in many respects deeply determined by an alternative epistemology, with which they operated quite successfully, will we be able to grasp the ultimate motivation behind the presentation and discussion of fanciful creatures, including monsters that decorate so many margins of manuscripts, capitals, eaves, and sculptures, all of which serving intricately for the illustration of God's glory and infinite potentiality. However, we also have to discriminate between this allegory-driven discourse on nature and the emerging encyclopedic approach since the twelfth and thirteenth centuries in which factuality eventually gained the upper hand. We thus face at least two competing discourses vis-à-vis the natural environment.

Keywords: Medieval epistemology, *Physiology*, bestiaries, encyclopedias, God's creation, *integumentum*, John of Garland, the *Niederrheinische Orientbericht*, allegory, Konrad von Megenberg

Introduction: The Bifurcation of the Study of Nature

What was nature in the pre-modern age? How did scholars, scientists, theologians, poets, and artists reflect on the relationship between human society and the natural environment? Many researchers have already addressed this issue,¹ addressing specific objects, topoi, or individual writers. What matters, however, and this really centrally, concerns the fundamental epistemology driving the pre-modern examination of nature and its etiology. This article will take into view highly influential voices particularly from the thirteenth and fourteenth centuries, but first we need to comprehend the universal foundations established in late antiquity. With 'nature,' we can easily recognize the material conditions surrounding people in the pre-modern world. Everything is an object first of all, but then quickly turns into a symbol and allegory. After all, as medieval philosophers understood very well, life would not have been understandable if it did not carry meaning, far beyond the physical dimension.

Physiologus

Taking the famous 'encyclopedic' work, *Physiologus* (ca. 2nd or 3rd century C.E., created originally perhaps in Alexandria, Egypt; translated into Latin in the early fifth century) as our starting point, we face a huge challenge in addressing the concept of 'nature' in medieval philosophy, epistemology, science, and theology. It is one thing to characterize this work and many others of that kind, along with countless visual examples such as gargoyles, monsters, hybrid creatures, etc., as purely allegorical and hence as divorced from the actual reality, and it is another thing to recognize in the *Physiologus* an extraordinary medium for the true, i.e., allegorical and spiritual understanding of nature from a human perspective penetrating deeply into the matter beyond the material conditions. Modern readers can easily dismiss the teachings by the anonymous author and his contemporaries since they obviously, so we tend to think, contradict the empirical data, or the

¹ For most recent studies, see the contributions to *Reading the Natural World in the Middle Ages and the Renaissance: Perceptions of the Environment and Ecology*, ed. Thomas Willard. Arizona Studies in the Middle Ages and the Renaissance, 46 (Turnhout: Brepols, 2020).

hard-core matter of reality; hence, we are easily left with nothing but fanciful descriptions that do not carry much meaning or relevance.²

But we would fool ourselves if we were to compare the *Physiologus* with a modern natural treatise or a scientific study, as the example of the chapter on the pelican illustrates, especially because the intentions by medieval writers, scholars and theologians alike mostly aimed at a different epistemology.³ The anonymous author's interest is not at all focused on the material or realistic description of this bird; instead, the discussion of this bird served primarily for a religious or allegorical reading, drawing commonly directly or at least indirectly from the Old or the New Testament and served, above all, for the quest of divine truth, the secret behind all life. The account provided here only sounds as if it were based on a natural observation, which then quickly proves to be deceptive because the narrative intention is aimed at a spiritual interpretation.⁴

2 Nikolaus Henkel, *Studien zum Physiologus im Mittelalter*. Hermaea: Neue Folge, 38 (Tübingen: Max Niemeyer, 1976); *Christus in natura: Quellen, Hermeneutik und Rezeption des "Physiologus"*, ed. Zbyněk Kindschi Garský and Rainer Hirsch-Luipold. Studies of the Bible and Its Reception, 11 (Berlin and Boston: Walter de Gruyter, 2019); *Framgmented Nature: Conceptions of the Natural Order in the European Middle Ages*, ed. Mattia Cipriani and Nicola Polloni. Studies in Medieval History and Culture (Abingdon, Oxon, and New York: Routledge, 2022). For an excellent overview, see the entry on "Physiologus," *Lexikon des Mittelalters*, vol. VI (Munich and Zürich: Artemis & Winkler Verlag, 1993), by various authors, 2117–22.

3 *Physiologus*, trans. Michael J. Curley (Chicago and London: University of Chicago Press, 1979); here ch. vi, 9–10; as to new efforts to date this text, see Alan Scott, "The Date of the Physiologus," *Vigiliae Christianae* 52.4 (November 1998): 430–41; Gohar Muradyan, *Physiologus: The Greek and Armenian Versions with a Study of Translation Technique*. Hebrew University Armenian Studies, 6 (Leuven and Dudley, MA: Peeters Publishers, 2005); S. Lazaris, *Le Physiologus grec*. Part 1: *La réécriture de l'histoire naturelle antique*. Micrologus Library 77 (Florence: Sismel, 2016). See also *The Medieval Bestiary in English: Texts and Translations of the Old and Middle English Physiologus*, trans. Megan Cavell. Broadview Editions (Peterborough, Ont.: Broadview Press, 2022).

4 Research on this famous treatise is vast, especially because the *Physiologus* was translated into many languages and exerted an enormous influence on medieval and early modern, science, literature, and the arts. See, for a good bibliography, <https://de.wikipedia.org/wiki/Physiologus>; for a more theological reading, see <https://www.newadvent.org/cathen/12068a.htm> (both last accessed on March 8, 2023). Guy R. Mermier, "The Phoenix: Its Nature and Its Place in the Tradition of the *Physiologus*," *Beasts and Birds of the Middle Ages: The Bestiary and Its legacy*, ed. Willene B. Clark and Meredith T. McMunn. Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 1989), 69–85. See now Anna Dorofeeva, *Reading Nature in the Early Middle Ages: Writing, Language, and Creation in the Latin Physiologus, ca. 700–1000*. Premodern Ecosystems – Climate, Environment, People (Leeds: Arc Humanities Press, 2023). For the Bestiary tradition that evolved from the *Physiologus*, see, for instance, Ron Baxter, *Bestiaries and Their Users in the Middle Ages* (Stroud: Sutton, 1998); William B. Clark, *A Medieval Book of Beasts: The Second-Family Bestiary – Commentary, Art, Text, and Translation* (Woodbridge, Suffolk: Boydell, 2006).

Although the pelican “is an exceeding lover of its young” (9), it still happens that a conflict erupts because the little ones tend to strike the parents in the face, reasons not being provided here. In response, the parents fight back and kill the young ones, though not out of evil intentions. They are so grief-stricken that they cry for three days – already a highly symbolic number – until the mother “strikes her side and spills her own blood over their dead bodies . . . and the blood itself awakens them from death” (10). This short description is then utilized for an interpretation of Christ’s Passion at the hands of His own people. Both Christ’s spilling of blood and water then find the specific, textually based explanation in the Scriptures. Not even those two elements are considered through the lens of material conditions; instead: “blood and water came forth for eternal life” (10). Little wonder that the pelican thus became one of the central icons of Christ’s suffering on the cross, His death, and subsequent re-birth. We can find the pelican depicted in Church capitals, manuscript illuminations, narrative discussions of the Bible, and at other locations.

The origin for this interpretation of the pelican’s action (vulning) was the misinterpretation, if that is the right word, of the bird’s behavior during the feeding of its young ones, pressing the bill toward a pouch below it from where it regurgitates fish as food, which colors the skin in red due to the blood of the fish.⁵

For the author of the *Physiologus*, or any of the countless writers and artists throughout the ages, this explanation was of no obvious value; instead, the central concern focused on the spiritual meaning since nature was a book of the divine creation, and to gain an understanding of that spiritual dimension was all that mattered for most readers, thinkers, spectators, or the faithful. God spoke to people through His creation; hence the carefully orchestrated moral, allegorical, and perhaps also anagogical explanation of all things in nature was the critical approach to the divine messages that needed close interpretations by the learned, whereas the ordinary people had to be content with visual representations. The vulning pelican hence represented Christ’s love for humanity and His selfless humility to save people from their perdition due to their sinfulness. The icon of this

5 Christoph Wetzel, *Das grosse Lexikon der Symbole*. 2nd ed. (Darmstadt: Primus Verlag, 2011), 234; Hans Biedermann, *Knaurs Lexikon der Symbole* (Munich: Droemersch Verlagsgesellschaft Th. Knaur Nachf., 1989), 328–29. A poor summary of the ancient iconography is given by Diane Apostolos-Cappadona, *Dictionary of Christian Art* (New York: Continuum, 1994), 275. The only really extensive and trustworthy article on this motive is provided by anonymous, “Pelikan,” *Lexikon der christlichen Ikonographie*, ed. Engelbert Kirschbaum SJ. Vol. 3 (Rome, Freiburg i.Br., Basel, and Vienna: Herder, 1971), 390–93. For a modern biological discussion of pelicans, see <https://en.wikipedia.org/wiki/Pelican>. Cf. also Christian Hühnemörder, “Pelican,” *Brill’s New Pauly*, online at <https://referenceworks.brill-s-new-pauly/pelican-e912480#> (both last accessed on March 3, 2023).

self-sacrificing bird continued to have a long-term impact and can be found, for instance, as late as in Conrad Gessner's *Historia animalium* from 1555.⁶

Nevertheless, it would be a naive concept to assume that pre-modern intellectuals entirely ignored nature in its material specificity and regarded it only as a medium for spiritual, or religious reflections. Instead, as Ernst Robert Curtius had formulated already in 1948, in the high Middle Ages, for instance, "The richness of the world and of life is reflected for it in the treasures and springs of power of the literary tradition . . . This is the source of a new imagery of the book."⁷ Indeed countless philosophers such as Prudentius, Cyprian of Carthage, Alain de Lille, Peter Riga, Baudri of Bourgueil, or Hildebert of Lavardin followed that concept and used imagery and metaphors of nature for the interpretation of the spiritual message. In particular, Alain identified nature as a "book of experience" and considered every creature a book that needs to be read critically so that we can understand the message and meaning. This was also the essential notion advocated by Hugh of St. Victor. In Curtius's words, "Thus all earthly things are prefigured as in a transcendent book."⁸

Referring to John of Salisbury's *Policraticus*, Curtius quotes: "In the book of our reason are inscribed not only pictures of things but also the divine ideas."⁹ In the later Middle Ages, the German scholar Konrad von Megenberg went so far as to create an encyclopedia of nature (*Buch der Natur*, 1350), based on Thomas de Cantimpré's *De naturis rerum* (between 1228 and 1244), combining the theological reading of the natural world with an incipient natural science perspective. But Konrad followed his own scientific discourse predicated on the ideal of the encyclopedia, whereas many other scholars embraced an allegorical comprehension of the natural world. I will return to him at the end of this study.

The specific topic, the material world, or nature, as a book, continued to exert a deep influence far into the sixteenth century, as documented by parallel efforts by Theophrastus Paracelsus (ca. 1493–1541), Montaigne (1533–1592), and

6 For a copy of that text with the corresponding image, see Kenneth Spencer Research Library, <https://blogs.lib.ku.edu/spencer/tag/vulning-pelican/> (last accessed on May 9, 2023). Conrad Gessner, *Thierbuch: das ist ein kurtze beschreibung aller vier-füssigen Thieren, so auff der erden unn in wassern wonend* . . . (1551–1558; Zürich: Christoffel Froschouwer, 1583). See also Christoph Gerhardt, *Die Metamorphosen des Pelikans. Exempel und Auslegung in mittelalterlicher Literatur – mit Beispielen aus der bildenden Kunst und einem Bildanhang*. Trierer Studien zur Literatur, 1 (Frankfurt a. M. and Bern: Peter Lang, 1979).

7 Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, trans. Willard R. Trask. Bollingen Series, XXXVI (1948; Princeton: Princeton University Press, 1953/1983/1990), 315.

8 Curtius, *European Literature* (see note 7), 320.

9 Curtius, *European Literature* (see note 7), 320.

John Owen (ca. 1563–1622).¹⁰ We would, however, also go wrong if we identified this approach to nature as purely symbolic or allegorical to the disadvantage of the concrete aspects of all existence. By contrast, as we will observe especially in the case of John of Garland's *Integumentum Ovidii* and of the anonymous *Nieder-rheinische Orientbericht*, both hardly ever discussed in the present context, a precise understanding of nature was necessary after all in order to reach for a higher category of comprehension. As Daniel F. Pigg notes, in William Langland's *Piers Plowman*, nature is a medium for the establishment of personal identity, as God's creatures, being part of divine wholeness. Hence, the return to nature would constitute individual restoration in physical and spiritual terms.¹¹

Macrobius (fl. ca. 400 C.E.) had already formulated that "a frank, open exposition of herself is distasteful to Nature, who, just as she has withheld an understanding of herself from the uncouth senses of men by enveloping herself in variegated garments, has also desired to have her secrets handled by more prudent individuals through fabulous narratives."¹² The true mysteries of nature, and hence of God, are not accessible to most people. "Only eminent men of superior intelligence gain a revelation of her truths; the others must satisfy their desire for worship with a ritual drama which prevents her secrets from becoming common" (87). Knowledge is thus divided into two categories, with the first one being so ineffable that only mystics, prophets, and some extraordinary philosophers can approach it with a clear sight. The other category would be the factual world obvious to everyone else, not carrying any particular spiritual relevance.¹³

10 Curtius, *European Literature* (see note 7), 322. See also Ivan Illich, *In the Vineyard of the Text: A Commentary to Hugh's Didascalicon* (1991; Chicago and London: The University of Chicago Press, 1993); Jesse M. Gellrich, *The Idea of the Book in the Middle Ages: Language Theory, Mythology, and Fiction* (Ithaca, NY, and London: Cornell University Press, 1985); Eric Jager, *The Book of the Heart* (Chicago and London: The University of Chicago Press, 2000), 50, commenting on the work by Hugh of St. Victor, remarks: "Even the flaws in the book are allegorized, as its errors and erasures are said to represent 'worldly ambition and fleshly desires'." See now also the contributions to *The Book of Nature and Humanity in the Middle Ages and the Renaissance*, ed. David Hawkes and Richard G. Newhauser. Arizona Studies in the Middle Ages and the Renaissance, 29 (Turnhout: Brepols, 2013).

11 See Daniel F. Pigg's contribution to the present volume. For an insightful discussion of allegoresis during the early modern age (Baroque), see the contribution to this volume by John Pizer.

12 Macrobius, *Commentary on the Dream of Scipio*, trans. William Harris Stahl, sec. printing, with revisions. Records of Western Civilization (1952; New York: Columbia University Press, 1966), 1.2.17, p. 86.

13 Martin Irvine, *The Making of Textual Culture: "Grammatica" and Literary Theory, 350–1100*. Cambridge Studies in Medieval Literature, 19 (Cambridge: Cambridge University Press, 1994); Anders Cullhed, *The Shadow of Creusa: Negotiating Fictionality in Late Antique Latin Literature*. Beiträge zur Altertumskunde, 339 (Berlin and Boston: Walter de Gruyter, 2015); see also the

Medieval Vernacular Perspectives of Nature and Epistemology

Jumping from late antiquity to the high Middle Ages, it is worth drawing our attention to a very similar comment by the Anglo-Norman poet Marie de France (fl. ca. 1170–1200) made the significant remark in the prologue to her *Lais* (ca. 1190–1200) that, following the grammarian Priscian (early sixth century), the ancients expressed themselves rather obscurely, and this fully intentionally, so that the subsequent generations would have to study closely and intently what the hidden meaning of certain texts might be: “The philosophers knew this, / and understood by their own experience / how, the more people passed through time, / the more subtle their intelligence would be, / and the more they would know how to guard themselves / from that which was to be passed over.”¹⁴ The literary discourse thus gained a major significance for philosophy and theology because it provided useful, if not necessary fictional images of the deeper truth, or of the divine message hidden in the natural world. Even though we might smile today about the grotesque and bizarre world of medieval monsters, for instance, or about Marie’s account of a werewolf in her *lai* “Bisclavret,” an allegorical reading facilitates the penetration of the literary veil behind which lies hidden, as in this case, for instance, the understanding of the true core of a human being, his/her nobility, honor, and dignity, which an ugly or horrifying external appearance would only hide but not distort at all.

It seems likely that Marie drew some of those insights also from the Spanish court physician, Petrus Alfonsi, a converted Jew, who had formulated similar concepts in his famous *Disciplina clericalis* (ca.1115) dedicated to King Henri I, though he had been more concerned with pragmatic aspects of making the best use of one’s time and of remembering one’s own past.¹⁵ As Marie then emphasizes: “Whoever wishes to protect himself from wrongdoing / should study and understand / and begin a heavy task; / through this he can further distance himself / and deliver himself from great sorrow” (23–27).

contributions to *Metaphilology: Histories and Languages of Philology*, ed. Pascale Catherine Hummel (Paris: Éd. Philologicum, 2009).

14 *The Lais of Marie de France: Text and Translation*, ed. and trans. by Claire M. Waters (Peterborough, Ont.: broadview editions, 2018), 17–22.

15 Sharon Kinoshita and Peggy McCracken, *Marie de France: A Critical Companion*. Gallica, 24 (Cambridge: D. S. Brewer, 2012), 20–22; as to Petrus, see John Victor Tolan, *Petrus Alfonsi and His Medieval Readers* (Gainesville, Tallahassee, et al.: University Press of Florida, 1993); Albrecht Classen, “Petrus Alfonsi,” *Literary Encyclopedia*, Oct. 4, 2021, online at: <https://www.litencyc.com/php/speople.php?rec=true&UID=14790> (last accessed on March 7, 2023).

Even if mystical literature might pursue a somewhat different intention or pursued alternative noetic perspective, we still can recognize powerful connections with the same phenomenon, human epistemology in face of the divine. Mechthild of Magdeburg (ca. 1208–ca. 1282/1294), for instance, in the prologue to her *Fließendes Licht der Gottheit*, urged her readers to search for “a pious spirit” and the reflections of past and present: “the ordering of the present life, the useful calling to mind of things past, and the prophetic disclosure of things to come.”¹⁶ Anyone trying to come to terms with the mystical revelation poured into her account would hence be required to “read it nine times” (39) because the book was the result of the divine presence in her vision, which ultimately meant, as she says, “I cannot restrain myself as to my gifts” (39). Mechthild experienced the *unio mystica* in “a secret place. There she is not permitted to beg on anyone’s behalf or ask, because all alone with her he wants to play a game that the body does not know” (41). In other words, the mystic points the way toward the alternative epistemology, translating the natural signs into spiritual ones. Hence, we are confronted with this extraordinary, inexplicable sentence: “she loses sight of the earth in her astonishment and is not aware of ever having been on earth. Just when the game is at its best, one has to leave it” (41).

Parallel to those epistemological explorations, we can also take into consideration what Gottfried von Strassburg had to say about the meaning of the literary account about the love of Tristan and Isolde, identifying it virtually as the Eucharistic bread we all have to consume. In the prologue, the poet states: “this is manna for all noble hearts, / indeed, in this way, their deaths remain alive. / We read about their lives, we read about their deaths, / and it is all as sweet for us as bread.”¹⁷

Of course, this is not the same as to insist on obscurity, as Marie does in the case of her *lais*, but Gottfried certainly constructed a universe where objects such as bread could symbolize in an allegorical manner the deeper truth of erotic love. The poet invited his audience to read along with him the meaning of bread and

16 Mechthild of Magdeburg, *The Flowing Light of the Godhead*, trans. and intro. by Frank Tobin (New York and Mahwah, NJ: Paulist Press, 1998), 32.

17 Gottfried von Strassburg, *Tristan and Isolde*, with Ulrich von Türlheim’s *Continuation*, ed. and trans. with an intro. by William T. Whobrey (Indianapolis, IN, and Cambridge: Hackett Publishing, 2020), p. 8, vv. 233–36. I would not agree, however, with Whobrey’s decision to translate “brot” with “manna.” For a solid commentary, see Tomas Tomasek, *Gottfried von Straßburg* (Stuttgart: Philipp Reclam jun., 2007), 125–40; cf. also Christop Huber, *Gottfried von Straßburg: Tristan*. 3rd, newly rev. and expanded ed. *Klassiker-Lektüren*, 3 (2000; Berlin: Erich Schmidt Verlag, 2013), 44–46. Mark Chinca, *Gottfried von Strassburg: Tristan*. Landmarks of World Literature (Cambridge: Cambridge University Press, 1997), 44–56, goes so far as to identify Gottfried’s text, according to the poet’s intention, “as sacrament” (54).

thus to gain a deeper sense of love. In contrast to the search for God, the search for erotic love was an operation everyone capable of reading the love story of Tristan and Isolde could carry out him/herself. The metaphor hence implied that there was a direct correlation between the object – bread, manna, or the host – and the experience of love. Epistemologically speaking, Gottfried thus suggested that the material existence served a specific purpose and was not simply a fact of life as an object. Instead, those who would be able to comprehend the spiritual meaning of bread would hence understand the meaning of love as well. Poetry, such as Gottfried's *Tristan and Isolde*, provided a literary medium for a spiritual interpretation. Consequently, for him and his contemporaries, philosophers and mystics alike, the material dimension served for the analysis of the true meaning behind it all, allowing us, perhaps, to reach even the anagogical level, as Hennig Brinkmann had discussed already at great length.¹⁸

Medieval Hermeneutics

In a previous study, I had already observed that “reading was certainly considered to be a magical and spiritual art as it provided the key to new dimensions of knowledge and understanding.”¹⁹ Here I want to go one step further and examine what was read and how it was read in the Middle Ages, what this might tell us in terms of the natural environment, and its intelligibility. After all, as Friedrich Ohly observed most poignantly, every physical object in this world was considered to be the symbolic expression of an idea pertaining to the immaterial existence, and this in light of the fundamental teachings of St. Augustine and, in his footsteps, yet separate as well, Peter Abelard. The natural world hence functioned, as Macrobius had underscored, as a medium for the spiritual understanding: “divinities have always preferred to be known and worshiped in the fashion assigned to them by ancient popular tradition, which made images of beings that had no physical form, represented them as of different ages, though they were subject neither to growth nor decay, and gave them clothes and ornaments, though they had no bodies” (87).

¹⁸ Hennig Brinkmann, *Mittelalterliche Hermeneutik* (Tübingen: Max Niemeyer, 1980), 211–14. He highlights, regarding Gottfried, the unity of love, life, and death, but he stays clear of a post-Romantic interpretation in the vein of Richard Wagner's opera. Instead, he observes the “Wechselspiel von *leben* und *tot*” (211).

¹⁹ Albrecht Classen, “Introduction,” *The Book and the Magic of Reading in the Middle Ages*, ed. Albrecht Classen (New York and London: Garland, 1998), ix–xlii; here xxi.

There are countless possibilities to examine these questions, all of them pertaining to the fundamental epistemological process and concept as it dominated the Middle Ages. Nature was not the totality of all being in their purely material properties; on the contrary, all natural objects carried a meaning and allowed, as we hear it being formulated many times by medieval philosophers to different degrees, such as Roger Bacon (ca. 1219/20–1291), a critical examination of the idea behind their objective existence.²⁰ In other words, it would have been considered absurd by pre-modernist thinkers to privilege nature as a study object by itself because it did not matter ultimately since it represented only a veil that had to be transcended in order to reach the spiritual dimension.

The true meaning has always rested behind the material level. The study of nature in hermeneutic terms thus constituted not what we commonly mean with natural sciences, but an investigation of the natural world in spiritual terms.²¹ Major scholars such as Friedrich Ohly, Christel Meier, Heinz Meyer, Ulrich Engelen, Rita Copeland, and now also Stephen Gersh have already laid the foundation for the analysis of medieval concepts of nature based on metaphorical, allegorical, and anagogical readings.²² Henri de Lubac, above all, can be credited with having elaborated this notion most clearly and extensively.²³ Even though much

20 Peter Ellard, *The Sacred Cosmos: Theological, Philosophical, and Scientific Conversations in the Twelfth-Century School of Chartres* (Scranton, PA: University of Scranton Press, 2007).

21 Chrysostomos Mantzavinis, *Naturalistic Hermeneutics*, trans. from German by Darrell Arnold in collaboration with the author (Cambridge: Cambridge University Press, 2005; in German: Tübingen: Mohr Siebeck, 2006); David Utsler, Martin Drenthen, Brian Treanor, and Forrest Clinger, *Interpreting Nature: The Emerging Field of Environmental Hermeneutics* (New York: Fordham University Press, 2013).

22 Ulrich Engelen, "Die Bedeutung der Edelsteine im *Rheinischen Marienlob*," *Frühmittelalterliche Studien* 7 (1973): 353–76; Heinz Meyer, *Die Zahlenallegorese im Mittelalter: Methode und Gebrauch*. Münstersche Mittelalter-Schriften, 25 (Munich: Wilhelm Fink, 1975); Christel Meier, *Gemma spiritalis: Methode und Gebrauch der Edelsteinallegorese vom frühen Christentum bis ins 18. Jahrhundert*. Münstersche Mittelalter-Schriften, 34 (Munich: Wilhelm Fink, 1976); Friedrich Ohly, *Diamant und Bocksblut: Zur Traditions- und Auslegungsgeschichte eines Naturvorgangs von der Antike bis in die Moderne* (Berlin: Erich Schmidt Verlag, 1976); see also the contributions to *Verbum et Signum: Beiträge zur mediävistischen Bedeutungsforschung*, ed. Hans Fromm, Wolfgang Harms, and Uwe Ruberg. Studien zur Semantik und Sinntradition im Mittelalter. 2 vols. (Munich: Wilhelm Fink Verlag, 1975); Rita Copeland, *Rhetoric, Hermeneutics, and Translation in the Middle Ages: Academic Traditions and Vernacular Texts*. Cambridge Studies in Medieval Literature, 11 (Cambridge: Cambridge University Press, 1991); see also the contributions to Stephen Gersh, *Metaphysics and Hermeneutics in the Medieval Platonic Tradition*. Variorum Collected Studies (Abingdon, Oxon, and New York: Routledge, 2021).

23 Henri de Lubac, *Exégèse médiévale*. 4 vols. (Paris: Aubier, 1959, 1961, 1965); for studies on de Lubac, see *T&T Clark Companion to Henri de Lubac*, ed. Jordan Hillebert (London and Oxford: T&T Clark, 2017); cf. now the survey article by Raymond Cormier, "Hermeneutics and Textual

of the theoretical reflections have focused on the works of Christian thinkers, such as Augustine or Hugh of St. Victor, parallel hermeneutic concepts can be found among Jewish and Muslim philosophers as well.²⁴ Every human word thus proves to be a metaphor for a deeper meaning, and all hermeneutics are hence determined by the desire to discover the divine message behind all earthly manifestations, as Friedrich Ohly once formulated, drawing directly from Georg Friedrich Hegel's philosophical ruminations about the "Kunst der Erhabenheit" (the art of the sublime).²⁵

For my purposes, I have selected, first, John of Garland's *Integumenta Ovidii* from the 1230s because of its considerable influence on subsequent generations of scholars and its great impact on late medieval hermeneutics at large, although John's work has not yet received the attention that it really deserves. Then, I want to test some of these teachings and their meaning in light of an anonymous treatise, the *Niederrheinische Orientbericht* from ca. 1350, composed by a well-educated, but probably not academically learned individual from Cologne or its vicinity, who composed this report most likely on behalf of the Cologne Archbishop. While the anonymous author was primarily concerned with the political history and culture of the Middle East, he also added an extensive section dealing with the fauna and flora of that region. The question that arises here is whether he actually intended to provide accurate, physical descriptions or whether he still relied on the traditional epistemological approach. The critical question for both sources will focus on their hermeneutic perspective, the concept of interpretation of the world, and the noetic approach to the material dimension as a mirror of the spiritual essence behind all reality.

Criticism," *Handbook of Medieval Studies: Terms – Methods – Trends*, ed. Albrecht Classen. 3 Vols. (Berlin and New York: Walter de Gruyter, 2010), vol. 1, 624–39.

24 *Philosophy and the Abrahamic Religions: Scriptural Hermeneutics and Epistemology*, ed. Torrance Kirby, Rahim Acar, and Bilal Baş (Newcastle upon Tyne: Cambridge Scholars Publ., 2013).

25 Friedrich Ohly, "Vom geistigen Sinn des Wortes im Mittelalter," id., *Schriften zur mittelalterlichen Bedeutungsforschung* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1977), 1–31. He emphasizes: "Während alle profane Literatur nur einen historischen oder Buchstabensinn des Wortes einschließt, enthält das Wort der Heiligen Schrift neben dem historischen oder Buchstabensinn, den es mit der heidnischen Literatur gemein hat, einen höheren, einen geistigen Sinn, einen *sensus spiritualis*" (2–3; While all secular/profane literature contains only a historical or literal sense of the word, the word in the Holy Scripture contains, next to the historical or literal sense, which it shares with pagan literature, a higher, a spiritual sense, a *sensus spiritualis*). As to the sublime in general terms, see Stephen C. Jaeger, *Enchantment: On Charisma and the Sublime in the Arts of the West*. Haney Foundation Series (Philadelphia, PA: University of Pennsylvania Press, 2012).

The *Niederrheinische Orientbericht* did not enjoy any significant popularity, and scholars have not investigated it much at all until most recently. Nevertheless, for our task, here we encounter an excellent example of late medieval examinations of the natural world that were determined by a variety of epistemological approaches. I will then round off these investigations with brief reflections on the encyclopedic treatise *Das Buch der Natur* by the fourteenth-century (hence contemporary) Konrad von Megenberg, who apparently deviated strongly and laid the foundation for a more factual discussion of all elements of nature without allegorizing them, setting the stage for late medieval encyclopedic writing in the vein of the school of Chartres.

John of Garland

This famous and highly influential Parisian teacher and prolific writer of grammatical and theological texts enjoyed particular success with his allegorical treatise, the *Integumentum Ovidii*, which has survived in a large number of manuscripts and gained high respect because it outlined in concrete terms the function of the literary *integumentum* as a key for global hermeneutics. Even Roger Bacon quoted John as an authority figure. This treatise carries particular value for the analysis of how medieval interpreters engaged with Ovid's *Metamorphoses*, but here I will limit myself to John's approach to the fundamentals of all interpretive efforts, and hence also those dealing with the natural environment.

He was born around 1195 either in Oxfordshire or in Essex. Although not well connected socially, and not being well-endowed financially, he managed to study first in Oxford and then Paris, from where he was ousted in 1229 for some trouble he had caused. Nevertheless, the pope appointed him as a teacher at the university of Toulouse, which granted him considerable freedom in his intellectual pursuits. But due to the re-emergence of the Cathar movement, he and most of the other teachers were forced to leave town, and he returned to Paris, where he then taught for the rest of his life. He also traveled to England and published his *Exempla Honestae Vitae* around 1258. The *Integumentum* was written between 1232, after John had returned to Paris, and 1234, when he included the title of the text into a list of his works. The number of other titles from his pen, mostly didactic and religious, is impressive but does not need to be detailed here.²⁶

²⁶ John of Garland, *Integumentum Ovidii: Text, Translation, and Commentary*, ed. and trans. by Kyle Gervais. TEAMS Secular Commentary Series (Kalamazoo, MI: Medieval Institute Publications, 2022); see also my review in *Mediaevistik* 36 (forthcoming). Gervais consulted eighteen

John's major concern was, following a long line of scholastic traditions, to make Ovid's literary masterpiece available, understandable, and hence useful for his Christian readers, which required a heavy dose of allegorical interpretations of the ancient myths translating those for the proper religious reading of his time, and thus establishing a meaningful analogy between the divine and the literary. Gervais highlights John's dependence on the respective teachings of Bernard (Silvester?) regarding allegorical interpretation and offers this explanation of the *integumentum*: "It refers to a false narrative that covers a true meaning. This 'truth' typically bears little relation to the exterior narrative . . . it had been inserted by the author, a truth about the world 'anterior to the text' and safely hidden from unlearned eyes by the cloak of myth" (7). John ultimately intended purpose of working with allegory was to uncover a "truth hidden under the covering of history (Scripture)," while *integumentum* was a "truth cloaked by pagan myth, waiting for the teacher to uncover it" (7).

Considering John's particular effort to provide a generic instrument in how to read Ovid's poem and many other classical texts from a pre-Christian era, aiming at his students, we can recognize in his *Integumentum Ovidii* a most useful treatise for our own interest to identify the fundamental methods predominating the entire Middle Ages regarding the best interpretation of nature. Even though glossators throughout the following centuries dissected and fragmented John's work to a point at which the original could no longer be recognized, we are still able to identify in his remarks some of the most influential standards of late medieval critical readings.²⁷ As Gervais also comments, John was determined by the conviction "that *ratio* provides the means of understanding God's creation, and therefore coming closer to the rational God Himself."²⁸

John himself emphasizes that his critical reading of Ovid's poem *Metamorphoses* provides an essential key which "unknots the knots of secrecy, discloses things hidden, rarifies the mists, and sings of the integuments" (41). Indeed, the ultimate purpose of all perspicuous reading consists of identifying secrets and to solve them for all to see what was hidden behind them. The natural world itself

manuscripts with a complete or at least partial text of the *Integumentum* and lists eight other manuscripts than contain individual couplets as marginalia, 33–37. Cf. also John of Garland's *De triumphis Ecclesie: A New Critical Edition with Introduction and Translation*, ed. and trans. Martin Hall. *Studia Artistarum*, 44 (Turnhout: Brepols, 2019), esp. 19–26 for his biography and 26–27 for a list of his works.

27 Giovanni di Garlandia, *Integumenta Ovidii: Poemetto inedito del secolo XIII*, ed. Fausto Ghisalberti. *Testi e documenti inediti o rari*, 2 (Messina: Casa Editrice Giuseppe Principato, 1933); Fausto Ghisalberti, "Il commentario medioevale all'Ovidius Maior consultato da Dante," *Rendiconti dell'Istituto Lombardo: Classe di Lettere e scienze morali e storiche* 100 (1966): 267–75.

28 Gervais, ed., John of Garland, *Integumentum Ovidii* (see note 26), 35.

can thus be identified as an infinite web of secrets which all wait for our analysis because the objects, whether animals, trees, plants, or rocks, cover the truth behind them.²⁹

They all are signs, signals, or *res*, as St. Augustine had formulated in his *De doctrina christiana*, differentiating between natural signs, *signa naturalia*, that signify without any will on their own part (*sine voluntate*), and deliberately used signs, or artificial signs (*signa data*) that serve for the communication among people and other living creatures. He further differentiated between conventions of signification and intentions of signification (*voluntas significandi* (see also his *De magistro* and *De dialectica*).³⁰ Undoubtedly, John of Garland was deeply influenced by this Church Father, although he offered a more specific translation strategy, rendering classical mythology into teachings viable for medieval Christianity.

Very explicitly, John points out that the “ideal world becomes the material world, creating the genesis and foundations of the beginning” (41). Changes, or transformations, take place either symbolically or magically (41). Then, however, John describes in a rather sober fashion the fundamental properties of nature, such as the properties of the elements, the four seasons, the fire zones, the course of the sun and the moon, the various types of winds, and concludes with a reference to Prometheus, a mythical figure, which then allows him to point out: “the truth [behind the myth] is hidden as if by a cloak” (45).

Before he then proceeds, John offers us straightforward definitions of myth, history, and the *integumentum*, the latter of which “is opened with a key: your instruction” (45). Almost like a poet, the author embraces a fictional medium to explain the idea behind the mythical accounts: “Saturn is time, his penis is abundance, his offspring are posterity, the sea is the belly, the foam is Venus” (47). After all, he is not interested in a natural analysis; instead, this scholastic argumentation is aimed at gaining an understanding of the meaning behind the material objects, or figures, that is, virtues and vices: “Understand the Olympian gods as virtues, the Giants as the mob of vices, Phlegra as the lowly mind, the mountain as pride” 47). In fact, John then goes through a long list of mythical figures

²⁹ See now my recent book, *The Secret in Medieval Literature: Alternative Worlds in the Middle Ages*. Studies in Medieval Literature (Lanham, Boulder, New York, and London: Lexington Books, 2022).

³⁰ Laura Velte, *Sepulkralsemiotik: Grabmal und Grabinschrift in der europäischen Literatur des Mittelalters* (Tübingen: Narr/Franck/Attempo, 2021), 23–24; cf. also Darell Jackson, “The Theory of Signs in St. Augustine’s *De doctrina christiana*,” *Revue des Etudes Augustiniennes* 15 (1969): 9–49; Remo Gramigna, *Augustine’s Theory of Signs, Signification, and Lying* (Berlin and Boston: Walter de Gruyter, 2020); Susannah Ticciati, *On Signs, Christ, Truth and the Interpretation of Scripture*. Reading Augustine (London: Bloomsbury Academic, 2022).

and provides an interpretation of their ethical and moral meaning, which pertains, for instance, to Cupid: “he has two arrows: desire and flight” (49). Similarly, wisdom, intelligence, and other properties find their expression through a reference to Phaethon, for instance (51).

Wherever we turn in John’s *Integumentum Ovidii*, we are in for surprises since everything becomes translatable from the material to the spiritual, from the ordinary to the divine: “The structure of the whole universe is the palace of the Sun, in which the philosopher seeks to stand as a column” (53). The natural world serves in a myriad of fashions to explain what is really ineffable, both in philosophical and in religious terms. However, the author does not ignore the factual conditions and demonstrates to be well informed about the practical, material aspects, such as the star constellations, even though the explanations for the names given might sound a bit fanciful (53). Yet, when he tries to explain a person’s unique character, such as stubbornness, the verses make good sense and underscore how much it is necessary to build analogies between the idea and the expression: “The resolute and inexorable man can be a rock, for the hard-hearted man has [a] stone in his breast” (55). Similarly, human characteristics are rendered in terms of Greek gods: “The House of Envy is the mind, Pallas is wisdom, the winged Mercury is speech, and Aglauros in her envy becomes a stone” (55).

John’s observation concerning human identity might sound rather modern and could even appeal to contemporary transgender people: “Tirsius is said to sometimes be a man and sometimes a woman; the nature of the sexes is revealed to him” (59). In a way, we can follow the author in his descriptions of the many different body parts of human beings, thus giving them all an image through which the signified becomes specific, as an image: “The lamentable Ino denotes hearing and sight; Autoñoë is the front part of the head, the imagination” (59). In fact, John traces the entire body, both inside and outside, considering the mental and the physical capacities: “the cell of logic is revealed by Agave, the scholarly man is Pentheus: the foregoing crowd beaks a man apart” (59).

Both the nature of love, which always carries the notion of death within itself, and the properties of wine are addressed in the mythologizing fashion.³¹ John could even be called a naturalist, or a botanist, when he talks about various plants: “Endive, sunfollower, chicory, or sun’s bride is cold and sits turned towards the sun’s light” (61). We can also recognize in him a pre-modern psychologist or criminologist: “Minos is the mind, Rhadamanthus the voice, and Aeacus

³¹ Jane Chance, *Medieval Mythography: From Roman North Africa to the School of Chartres, A.D. 433–117* (Gainesville, Tallahassee, et al.: University Press of Florida, 1994). She considers John of Garland only as a minor contributor to this discourse (62).

actions: they are three, and they punish the three crimes of the guilty” (63). Then, John uses references to mythological figures to describe various vices, such as greed, human behavior, such as a merchant’s excessive hectic and lack of steadiness (63), and the features of learning by means of an allusion to a garden: “the garden is his school, the trees are the many books, the fruit gleams as splendid learning, / the branch of gold shines as wisdom, the serpent is the toil which the mind of the learned man strives to overcome” (65).

John never hesitates to address both astronomical features and small details in human characters. As general as some of his comments sound, they are still directed at the concrete materialism of nature: “Beautiful Ceres is the crop, Proserpina the seed, and Pluto the earth, the husband whose wife produces by labor” (69). The changes of the ocean’s tides are addressed through a reference to Cyane (69), and garrulousness is described through a brief comment on the magpie: “The burden of garrulousness is signified by the magpies’ garrulous tongue, which pours out insults, abuse, and threats” (71). Only as a side note, Wolfram von Eschenbach also referred to the magpie in order to describe the result of the interracial marriage between the white knight Gahmuret and the black Queen Belacane in *Parzival* (ca. 1205).³² Thus, both in this romance and in John of Garland’s *Integumentum Ovidii* do we observe the intricate and purposeful combination of careful natural observation with the effort to allegorize the objects in nature or animals.

John equates the wretched peasant with the “noisy frog: plague-ridden, a swollen friend of the belly, dark, drowned, threatening” (73). In parallel, though on a different plane, birds and lover are compared with each other: “the bird and love both seek lonely spots” (73) – undoubtedly a classical trope, especially if we consider the timeless role of the nightingale symbolizing love poetry since Ovid’s

32 Wolfram von Eschenbach, *Parzival: Studienausgabe*. Mittelhochdeutscher Text nach der sechsten Ausgabe von Karl Lachmann, Übersetzung von Peter Knecht, Einführung zum Text von Bernd Schirok (Berlin and New York: Walter de Gruyter, 1998), 752, Book XV, section 748: “agelstern māl” (sign of the magpie). Wolfram von Eschenbach, *Parzival and Titurel*, trans. with notes by Cyril Edwards. Oxford World’s Classics (2004; Oxford: Oxford University Press, 2006), 313. In the prologue to his romance, Wolfram identifies the color of the magpie as a symbol of the binary nature of the human heart, combining heaven with hell. The combination is the signature of most people, being good and bad at the same time. Evilness would be tantamount to blackness altogether. See now Albrecht Classen, “Blacks in the Middle Ages – What About Racism in the Past? Literary and Art-Historical Reflections,” pre-print at <https://www.qeios.com/read/KIJP54>; comments at: <https://www.qeios.com/notifications>; *Current Research Journal of Social Sciences and Humanities* 6.1 (2023): 1–18; online at: <https://bit.ly/3MuEQsA>.

time, if not earlier.³³ Picking up the ancient fable tradition established by Aesop, John also refers, as many of his didactic contemporaries did, to the ant as a provident creature that forms “an honest people” (75). Both the bull and the sparrowhawk, but also the partridge appear in the epigrams (77), only fleetingly, of course, but still definitive enough to confirm the extent to which the narrator made strong efforts to combine the mythological with the natural and to use their combination for the formulation of ethical, spiritual concerns. He could also wax poetic when he addresses Ethimadibus: “We say that the neighboring pieces of land are sisters, which the sea waves divide and separate from one another” (77). At other times, the epigram simply provides numerous images of nature or people’s work in nature: “The fisherman fishes for profit, and a tree is leafy and fruitful” (79).

The details of these references are limited, but the sheer number of them underscores the presence of a rich kaleidoscope of the natural world. At the same time, the interest does not rest on the animals, plants, or reptiles because they only symbolize vices and virtues, such as snakes (= vices) “which the boy with an upright guardian works to overcome” (79). Thus, John creates an analogy between the “apple of Atlas” with “the wise man’s honor” (81). Undoubtedly picking up on the ancient fable tradition, he comments on the boar, which he relates with the “heat of anger” (83), whereas the lion is a symbol of lust (83). We also hear about the weasel “which gives birth through its mouth” (83).

We recognize here a direct echo from the *Physiologus*, except that there we are told that “the female receives the seed of the male in her mouth and, having become pregnant, gives birth through her ears” (50). Both statements would have to be discarded as fictional comments about the weasel’s true characteristics, but in neither case does the actual realistic explanation matter essentially. Instead, John, following a long learned tradition, aims at providing a general comment with which he can build bridges between the Ovidian text and the prevalent medieval bestiary tradition.³⁴ The reference to Priapus allows the author to reflect

33 Wendy Pfeffer, *The Change of Philomel: The Nightingale in Medieval Literature*. American University Studies, Series 3: Comparative Literature, 14 (New York, Bern, and Frankfurt a. M.: Peter Lang, 1985); Sabine Obermaier, *Von Nachtigallen und Handwerkern: ‘Dichtung über Dichtung’ in Minnesang und Sangspruchdichtung*. Hermaea. Neue Folge, 75 (Tübingen: Max Niemeyer, 1995).

34 Wilma George and Brunsdon Yapp, *The Naming of the Beasts: Natural History in the Medieval Bestiary* (London: Duckworth, 1991); Debra Higgs Strickland, *Medieval Bestiaries: Text, Image, Ideology*. RES Monographs in Anthropology and Aesthetics (Cambridge and New York: Cambridge University Press, 1995); Debra Hassig, *Medieval Bestiaries: Text, Image, Ideology*. RES Monographs on Anthropology and Aesthetics (Cambridge: Cambridge University Press, 1995); Renée Ward, “Bestiaries, Aviaries, *Physiologus*,” *Handbook of Medieval Studies: Terms – Methods – Trends*, ed. Albrecht Classen. 3 vols. (Berlin and New York: Walter de Gruyter, 2010), vol. 2, 1634–42; Susan

on the importance of fertility (83), and the reflections on the Bacchian rites make it possible for the author to comment on the purity of the soul (85).

However, both here and elsewhere, it's neither the Greek mythology nor the natural world that occupy the author's mind; instead, all of his efforts are aimed at metamorphizing the material dimension and to discover the spiritual one behind it, such as in the case of Adonis: "Youth is called a short-lived flower, which quickly passes away and flees like an empty shadow" (87). Commenting on Daedalion's daughter, John remarks: "I will touch on many things in a few words: there is a fleeing bird, a weeping man, water, a mountain, a mountain dweller, and a fierce beast" (89). We thus recognize here a curious amalgamation of mythology, natural sciences, moral and ethical ruminations, and spiritual teachings. Thus, it does not come as a surprise that the author also discusses envy, music, greed, drowning, reason, a diver and lover, and other aspects (89). In short, John is not a natural scientist, and also not a poet, and yet he embarks on both aspects and combines them with his interpretation of the mythical figures cited by Ovid in his *Metamorphoses*.

Undoubtedly, this author proves a high degree of learning, but he employs that not for a pragmatic analysis of the natural world. Instead, we recognize here a unique strategy to combine literary with religious interpretation and to utilize the Ovidian commentary for spiritualizing reflections without a specific limit in the hermeneutic approach. However, even John does not always have a straightforward answer to the mysteries of the classical text, so when he appeals to his audience: "Explain what that means" ("Pande quid ista uelint," 92/93). We could say that John utilized many different interpretive traditions to make sense out of this famous poem recognizing in it a narrative medium for esoteric, natural, spiritual, and religious readings.

Although the author draws extensively from the material world for his reflections on Ovid's poem, he really aims at an allegorical reading of the natural environment: "The bitter wild olive, which signifies the poison of words, means that your tongue should not produce evil juices" 95). However, in this process of pulling all kinds of narrative threads together, John begins to mythologize himself and transcends the limits of rational hermeneutics without regards for the material conditions, so when he comments on Anaxarete: "The stone that has long been in her hard heart turns the limbs of stern Anaxarete into stone" (97).

Crane, *Animal Ecounters: Contacts and Concepts in Medieval Britain*. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2013); *The Medieval Bestiary in English: Texts and Translations of the Old and Middle English Physiologus*, ed. and trans. Megan Cavell (Peterborough, Ont.: Broadview Press, 2022).

His ultimate goal hence seems to be to translate the classical source into a textual medium for moral and ethical reflections: “We say that Hippolytus, though a youth, had the character of an old man and overcame the sea of fleshly desires” (99). So it might not come as a surprise that this *Integumentum Ovidii* ultimately aims, so it seems, for the self-transformation into a poet who is empowered to transcend the limitations even of time: “May the star [the old authorities] that knows no setting shine for me and give an end to my work: may it be an end without end for me” (101).³⁵ We observe, in other words, an intricate combination of literary creativity, faith, reason, and then also the natural environment.³⁶ The latter appears sometimes at great length, sometimes only in a cameo, and it is not the reality of the body and flesh, but the symbolic meaning that concerns John the most. He operates both as a poet and a psychologist, so to speak, as a naturalist and as a philosopher, as a moralist and a theologian, such as when he explains Diomedes wounding of Venus’s hand: “A man wounds the hand of Venus when he cuts off desire and deed, avoiding idleness by his own exertions” (97).

We are given many allegorical images of nature, but we are still required to apply critical analysis because the poetic word denies the easy access, such as in the reference to Pomona and Vertumnus: “The changing of the seasons is called Vertumnus and he desires Pomona: time nourishes fruit trees and fruit” (97). The combination of all these elements might hence provide us with the desired explanation for the great popularity of John’s *Integumentum Ovidii* because, far superseding the *Physiologus* or the encyclopedic tradition launched by Isidore of Seville and others,³⁷ the hermeneutic strategy here is predicated on a clear perception of the natural world, a poetic approach to the Ovidian *integumentum*, and the author’s deliberate strategy to re-mystify the classical myths for a new spiritual reading. John was certainly not trying to blind us to the critical examination of the material dimension; instead, his efforts, very much in line with some of the greatest intellectual predecessors such as Hugh of St. Victor, aimed at uncovering an additional interpretative approach with which the individual would be able to comprehend the spiritual message behind the physical existence.

35 Kenneth J. Knoespel, *Narcissus and the Invention of Personal History* (New York and London: Garland, 1985), 45, emphasizes that John’s focus on Prometheus, for instance, underscores “man’s own creative ability to transform raw matter into art and then to comprehend that this capacity is a manifestation of reason which comes from the heavens.”

36 Gervais, ed. and trans. (see note 26), 28.

37 Robert Collison, *Encyclopaedias: Their History Throughout the Ages. A Bibliographical Guide with Extensive Historical Notes to the General Encyclopaedias Issued Throughout the World from 350 B. C. to the Present Day*. 2nd ed. (New York: Hafner, 1966); for a useful list of the major representatives, see <https://bestiary.ca/prisources/psdetail105102.htm> (last accessed on March 9, 2023).

The Bestiary Tradition in the *Niederrheinische Orientbericht*?

Or: The Merging of Two Discourses on Nature

About hundred years later, an anonymous author composed this extraordinary Middle Low German report about the Middle East, in which we learn in impressive detail much about the history and politics of the various kingdoms of Armenia and Georgia, the Sultanate of Egypt, and to some extent of the Mongolian Empire. The focus, however, rests on Egypt and the neighboring countries. While ca. three quarters of the narrative, which has survived only in two manuscripts today kept in the *Historisches Archiv* of the city of Cologne, are occupied with comments about many different aspects of the local courtly culture, including fashion, hunting practices, political rituals, etc., the last quarter focuses on the fauna and flora, again, without a doubt, partly drawing from the *Physiologus* tradition, but partly also on the author's eyewitness account. The empirical aspect cannot be ignored at all, and yet, there are many examples that challenge us in hermeneutic terms. This forces us to question, once again, what concept of nature this author might have had and what intention he pursued when he discussed the many different animals, fruit, flowers, trees, reptiles, etc.³⁸

Considering the concrete, realistic, and sober approach to the political and cultural aspects he had observed all over the Middle East, we would expect that he treated the fauna and flora through a similar perspective. However, almost like in an Orientalizing fashion, he states immediately that all animals in those lands are much larger and more beautiful than those back home in Europe, as if any such comparisons would make sense. But he is also very clear about the status of the various species; those that are very rare in the Occident can be found

38 Helmut Brall-Tuchel, *Von Christen, Juden und von Heiden: Der niederrheinische Orientbericht*, ed., trans., and commentary by Helmut Brall-Tuchel. Unter Mitarbeit von Jana Katczynski, Verena Rheinberg, and Sarafina Yamoah (Göttingen: V & R unipress, 2019); Anja Micklin, *Der »Niederrheinische Orientbericht«: Edition und sprachliche Untersuchung*. Rheinisches Archiv, 163 (Vienna, Weimar, and Cologne: Böhlau, 2021); for a brief summary and discussion of this text, see now Albrecht Classen, "Anonymous: Niederrheinische Orientbericht [Low Rhenish Report about the Orient]" (1720 words), *The Literary Encyclopedia*. First published 24 August 2022; online at: <https://www.litencyc.com/php/sworks.php?rec=true&UID=40912>, last accessed on April 11, 2022. For pragmatic reasons only, I refer to Brall-Tuchel's edition, unless a specific philological issue requires a closer analysis of the manuscript versions. I translate, when quoting, directly from the Middle Low German text. My English translation of this major travelogue is about to appear with Boydell & Brewer (2024).

in large numbers in the Orient, such as lions, dragons, elephants, tigers, salamanders, leopards, dromedaries, camels, antelopes, etc. (164). By contrast, wolves and bears could be hardly discovered in the East, unless they would be exported there, which indicates some degree of international trade in exotic animals for courtly entertainment, as was rather common with birds of prey, especially falcons that were much sought after for the sport of hunting, also in the Arabic world.³⁹

In the case of the rhinoceros, the author can only provide a description as he has heard it from some reports (164). Not surprisingly, the account immediately slips into the realm of fantasy or imagination, so when the animal is presented as a hybrid creature, with all the major body parts looking like those of other animals, for instance, the head like that of a goat, and the feet like those of a pig. At any rate, as the narrator comments, those animals cannot tolerate dirt, whatever that might mean.

The panther is described as a most beautiful animal, decked in all colors of the rainbow, and this in such an intricate fashion that no one in the world would be able to describe it (166), a trope that could be a direct reference to the famous multicolored dog Petitcreiu in Gottfried von Straßburg's *Tristan* (ca. 1210). It remains unclear why the panther is said to emit a delightful smell. According to the narrator, this animal exists only in India and eats nothing but delicate plants, which trigger the good smell. While everything up to this point seems to refer to a gentle animal, the conclusion suggests otherwise, or complicates the matter further: "wherever the panther goes, all evil animals and snakes flee" (166).

The antelope is said to be a most lively, beautiful animal that enjoys jumping around. Its horns would be sharper than a saw and can cut down entire trees (166). The tiger emerges as a most fierce and dangerous animal that can cause much damage. But the narrator shares a strategy with mirrors and the cubs taken away from the mother animal which helps to drive the tigers away. The following comments about other animals, such as the salamander, the wild ass, the belech (sic), or the giraffe prove to be intricate combinations of fact and fiction, a merging of hearsay and perhaps personal observation. We also hear about the buffalo and the elephant, both marked by their extraordinary size and strength. For instance, the elephant's young ones are said to be seven times larger than a great Frisian ox (172). But the elephants are scared of dragons that tend to devour its young ones (172).

39 Thierry Buquet, "The Gyrfalcon in the Middle Ages: An Exotic Bird of Prey (Western Europe and Near East)," *Falconry in the Mediterranean Context During the Pre-Modern Era*, ed. Charles Burnett and Baudouin Van den Abeele. Bibliotheca Cynegetica, 9 (Geneva: Librairie Droz, 2021), 79–98.

It seems difficult to confirm this account as to its accuracy because we hear both of dragons and of camels, and when the author turns to crocodiles, which are said to be extremely dangerous, we suddenly hear that they have a fur like a wolf. Once the crocodile has grabbed its victim, whether a horse or a human being, or any kind of animal, it drags it into the water to devour it there. On land, this amphibious creature – certainly a term not known by the anonymous author – operates like a wolf, and in water like an otter (176). The crocodiles, however, are also said to have a natural enemy, a snake which follows it into the water. Once the crocodile has devoured it along with fish, the snake survives in its body and bites its heart and thus kills it (176).

As is often case in this account, the narrator concludes this section with a general comment, emphasizing that there would be much more to say about it, following the reports in the famous late antique *Vitae Patrum* (176). In other words, the narrator integrates his own account into an ancient textual framework and thus draws from that authority for his own empirical studies. At the same time, to help his audience, he offers numerous comparisons with animals back in Germany so that they could imagine what he is talking about in specific terms. Naturalism and spirituality thus merge to form an innovative mode of epistemology that bristles with realistic and religious elements at the same time, though the latter tend to be more hidden and emerge only when curious features of an animal enter the picture.

Intriguingly, as is often the case, the discussion of the eagle as a bird for hunting relies both on western familiarity with it and specific accommodations at the Muslim courts where each eagle has two masters assigned to it, who in turn are supported by two servants (180). In the case of the ostrich, we learn of a number of concrete habits, which appear to be both accurate and speculative, mirroring maybe a certain interest in biology and also an interest in offering mystifying explanations. When the ostrich has placed all eggs in the ground, both parents stand above them and gaze into the sun so that the rays reflect directly onto the eggs to make them mature faster (182). The author also does not hesitate to report that the ostriches enjoy spending time near the place where horses are shod because they like to eat the old nails (182).

As to be expected, here we also encounter the pelican whose characteristic behavior is described just as in the case of the *Physiologus*, except that the reason for the death of the young ones remains rather vague, identified only as the mother's excessive love (182). The comments about the flamingo (182) and the common quail (144) appear to be straightforward reflections of the author's personal observations, whereas the remarks about the phoenix prove to be based on general knowledge about this mythical bird. The text in the *Physiologus* (no. ix, 13–14) does not correlate with what the anonymous author of the *Niederrheinische Ori-*

entbericht has to say at all since especially all biblical references are missing in the latter. Instead, here we only learn that the phoenix is very rare, has hardly ever been seen, but that the kings and princes enjoy using its feathers because of its extraordinary beauty. Allegedly, as the people in Egypt and elsewhere claim, the phoenix would exist only in Arabia (184). Both in the ancient source and here in our text, we are informed about the “Coradrius,” a bird that could suck out sickness when its beak was pressed into a sick person’s mouth (186).⁴⁰ But once the bird turns away or refuses to carry out this service, the patient can expect for sure to die soon. Compared to the *Physiologus* or John of Garland’s poem, the anonymous author leans much more strongly toward empiricism, but this does not mean that he would have abandoned the allegorical reading altogether.

When the author turns to the Middle Eastern flora, he highlights, above all, fruit-bearing trees, but then also cotton, rice, and pepper. He comments with amazement on the wood of the Tree Aloe, the origin of which is unknown, while tree trunks come floating down the Nile. That river, however, allegedly originates from paradise (190), a comment that facilitates the explanation since no one can ever explore that holy location. Moreover, in some types of apples, which he calls paradise apples (190), one can find a crucifix, maybe meaning a discoloration that looks like that object, especially since he then adds that those apples cannot be kept for a long time (190).

However, when the author has the occasion to describe rice and sugar, that means, particularly the method of harvesting and treating them, he obviously drew from his personal observations, which then turn also to the working conditions of the farmhands who often receive no payment and are poorly treated, receiving only water and bread for their nourishment (196). This section continues with numerous other references to various plants and fruit, which often appear to be precise, realistic, and empirical. In many ways, the author increasingly left the religious interpretations behind, abandoned the allegorical method, and focused on the objects as he had inspected them during his many years in the Middle East. This also explains why he then adds comments about the mercantile value of the various fruit or plants. Nevertheless, he continued to refer to the Bible as a source, and at times he also revealed his familiarity with the *Physiologus*, at least when the focus rested on mythological creatures.

In comparison with John of Garland, not to talk of the ancient sources, the anonymous author pursued a considerably more empirical approach and brought to bear much knowledge he had apparently acquired during his long stay in Egypt or Syria. For him, there was no more any need for mythography, although

40 Ron Baxter, *Bestiaries and Their Users in the Middle Ages* (see note 4), 66–68.

he still resorted to mythologizing explanations in some cases (ostrich, pelican, dragon, etc.).

Konrad von Megenberg

Finally, for a comparison of the various types of discourses focused on the natural environment within the more or less same textual discourse, we should also consider the massive treatise by the Regensburg cleric Konrad von Megenberg (1309–1374), dealing both with the physical nature of human beings and with the natural environment, his *puoch von den naturleichen dingen*, which he began to compose in 1347 or 1348 and completed in ca. 1350.⁴¹ With this massive treatise, the interest in allegory appears to have faded away; and instead, Konrad makes every possible effort to describe the nature of all people and all things in impressive detail without probing their symbolic, moral, or spiritual meaning. For instance, examining the female breast, he probes meticulously whether a black woman's milk is better than a white woman's, opting for the former because those women "sint von grozzer hitz" (48; have a great heat in them [in terms of the four humors]).⁴²

In chapter One, the author examines virtually all human body parts as to their properties and functions, whether the teeth or the neck, whether the hands or the lungs, whether the eyes or the ribs. The following chapters engage with these topics: 2. the heaven and the seven planets; 3. animals; 4. birds; 5. sea creatures; 6. snakes; 7. worms and reptiles; 8. trees; 9. especially pleasing trees; 10. herbs; 11. gems; 12. metals; and 13. odd human creatures.

The example of fog in II.26 allows us to gain a good concept of how Konrad approached his task and how he examined the natural phenomena. Without resorting to any symbolism or religious reading, the author simply states that fog emerges from a wet ground where the sun rays do not hit, making that fog heavy. Consequently, one can observe fog both at dusk and at dawn when the sun has

41 Gerold Hayer, *Konrad von Megenberg, 'Das Buch der Natur': Untersuchungen zu seiner Text- und Überlieferungsgeschichte*. Münchener Texte und Untersuchungen zur deutschen Literatur des Mittelalters, 110 (Tübingen: Max Niemeyer, 1998), 8–9. Konrad von Megenberg, *Das „Buch der Natur“*. Vol. II: *Kritischer Text nach den Handschriften*, ed. Robert Luff and Georg Steer (Tübingen: Max Niemeyer, 2003). This is now freely available online at: <https://www.degruyter.com/document/doi/10.1515/9783110911732.fm/html> (last accessed on March 9, 2023).

42 It would be fascinating and far reaching to analyze this passage more closely in light of the medieval discourse on race because at least on the surface of the text, Konrad grants the black woman priority over the white woman in terms of her feminine nature. See now Albrecht Classen, "Blacks in the Middle" (see note 32).

the least influence. Mostly, fog appears primarily during Fall, Winter, and Spring. Once fog has risen, the moisture is taken up by the clouds, from which then results rain. When that happens during the Summer, one can expect all the plants to grow well. Fog rarely reaches mountainous heights or hills, and for that reason people used to choose those locations for their settlements. At the present time, however, as Konrad comments, people prefer a proximity to water for comfort and build their houses near the shore of a river or another body of water. Yet, this has a negative impact on the climate and living conditions, meaning that many people easily contract illnesses and die prematurely.

Often, fog is smelly and thick, which the author explains with a reference to rotting plant matter and an unclean soil. People exposed to fog would thus face an increased risk of falling sick and dying early. As a precaution against this danger, Konrad recommends that people close their windows and doors properly and eat well before they leave their houses (121). There are no references to demons, to water spirits, to hellish figures, or to any other irrational notions regarding the origin and properties of fog. Instead, it is identified as a natural phenomenon that occurs regularly and can have a negative impact on a person's health (122).

In another chapter in book 3, Konrad examines ants and recognizes that those small insects have as much a sense of smell as dogs or people, as Aristotle had already explained (330). He demonstrates the truth of the matter by providing an example when some sulfur and oregano are mixed and placed on an ant hill, whereupon all ants try to get away from it as fast as possible and stop working (331). Konrad is also filled with praise of the industrious ant and advises his audience to take a good example from that because hard work and dedication would be the guarantee for success in life.

He also notes with astonishment that ants are the only creatures that carry their dead out of their living spaces and bury them, at least according to the authority of St. Ambrosius (331). Moreover, the ants make sure that the grain which they transport into their homes is well dried so that it does not rot. Again, the author is content with these sober facts, and leaves aside any attempts to allegorize, as much as he admires the ants' hard work and business, which he recommends his audience to imitate.

However, in one of the last chapters dealing with special wells all over the world with magical, mostly healing properties, Konrad also reveals his interest in miracles and God's working in this world. Here he suddenly draws from the authoritative texts by Origen of Alexandria, Jerome, Augustine of Hippo, and Solinus (521), admitting openly that he culled that information from them without questioning the validity of their statements. Whereas before, the author had tried his best to be as specific as possible based on concrete discussions of the natural phenomena, here and especially in the last chapter he allows the miraculous and

monstrous to enter his discourse. The explanation of monsters would be that people had committed acts of unnatural behavior and had copulated, for instance, with oxen, which led to hybrid creatures. However, Konrad then intervenes and doubts that a mingling of human and animal seeds would be possible (522–23).

Nevertheless, Konrad then delves into a discussion of the various types of monstrous creatures and their origin, such as women's lack of chastity and hence their sexual fantasies which allegedly impacted the shape and form of their fetuses (523). He also accepts the possibility that astrological conditions might explain the birth of monstrous people (524). Konrad then describes the traditional list of monsters and cannibals (525–26) and even expands on it, talking, for instance, of "pigmei" who are dwarfs and live on top of a mountain in India (526). Thus, it does not surprise us that he also discusses the Amazon women and their militant behavior (527–28).

Konrad concludes with a kind of bibliography of his sources, beginning with Aristotle and ending with Jacob of Viatico (i.e., Jacques de Vitry). In a way, we could determine that this author mostly embraced the naturalist approach, but at the end also followed the allegorical model since his authority figures, especially Jacque, suggested that way to him. We thus face a wide variety of approaches to nature, to a large extent determined by ancient literature and then especially the *Physiologus*, not to forget Isidore of Seville's *Etymologiae*, but increasingly also influenced by empirical analysis. By the end of the Middle Ages, those discourses were fully available for the learned and also the unlearned, and nature itself thus turned into a highly contested field of epistemology.

Conclusion

The study of nature has always occupied intellectuals throughout time, and so also in the Middle Ages and the early modern period. There are, however, numerous different approaches and methodologies, as post-modern science also has to realize on a constant basis. Looking at some of the more influential medieval treatises on nature, we realize that the authors were not so much interested in empirical studies; instead, they probed more deeply into the allegorical and spiritual (anagogical) meaning of all natural objects and living creatures.

In the late Middle Ages, the emphasis slowly but certainly shifted to a more materialistic approach, but the traditional concepts as outlined by Macrobius, St. Augustine, Isidore of Seville, and later Albertus Magnus and others held sway for a long time, and this for good reasons, as the discussion of the treatise by John of Garland indicates because the reliance on the concept of the *integumentum*

proved to be highly effective in terms of explaining God's creation in all of its innumerable manifestations. This finds its confirmation also in the descriptive account by the anonymous author of the *Niederrheinische Orientbericht* and in the scientific treatise by Konrad von Megenberg, but then also in countless literary works. The situation finally changed, after a profound and long-drawn-out process, in the eighteenth century.⁴³

We might wonder in light of all these insights whether anyone studying nature, both in the Middle Ages and today, would or could approach the subject matter completely objectively, or materially. Of course, we can easily claim that virologists, for instance, pursued a very concrete purpose when they raced to find medication or a vaccine against COVID-19 in 2020. But no perfect solution has been found and might not exist ever. While we live in a rather atomistic world, the pre-modern scientists fully accepted their responsibility to study nature for concrete purposes, including the monsters, as Konrad also indicated. Every element, every creature had its own relevance within the infinite and divine creation, and it continues to enjoy that until today, of course, including the dangerous viruses.

Intriguingly, we could claim that even the most recent natural sciences do support such a view since everything exists, more or less, in a symbiotic relationship and finds its *raison d'être* within a spiritual context, as elusive as that might be. Medieval efforts to comprehend nature certainly make good sense even today when they were predicated on allegory. However, this does not mean that those medieval and early modern thinkers were blind to nature. Instead, they perceived it through their own lens which was fully meaningful for them in spiritual terms. Today, by contrast, we are completely obsessed with pure materiality, especially in the sciences, whereas integrative medicine, for instance, has already taken a different route and alerted us to the holistic nature of all beings, perhaps considering to incorporate the findings of their medieval predecessors once again.⁴⁴

⁴³ *Languages of Science in the Eighteenth Century*, ed. Britt-Louise Gunnarson (Berlin and New York: De Gruyter-Mouton, 2011). To do justice to this large topic would require a book-length study of the history of sciences throughout the centuries. But there is already a whole legion of relevant books addressing this question.

⁴⁴ See my introduction to *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature: Exploration of Textual Presentations of Filth and Water*, ed. A. Classen. *Fundamentals of Medieval and Early Modern Culture*, 19 (Berlin and Boston: Walter de Gruyter, 2017), 1–87 and the respective articles.

Warren Tormey

Waste, Excess, and Profligacy as Critiques of Authority in Fourteenth-Century English Literature

Abstract: Drawing from the recent work of scholars in the realm of “waste studies,” this essay attempts to refine the depiction of the medieval allegorical figure of the “waster.” Building on the portrayals depicted in the allegorical poems of *Wynnere and Wastoure* and *Piers Plowman*, this essay establishes the waster as an aristocratic landholder prone to habits of destruction and ruination of the landscapes under his control. These habits conjoin with his arbitrary exercise of authority over the social subordinates residing within his domains. The essay then argues that these characteristics are embodied in a pair of central characters from two signature works of later fourteenth-century English literature: Lord Bertilak from *Sir Gawain and the Green Knight* and Lord Theseus of Chaucer’s “Knight’s Tale.”

Keywords: Waste, waster, hunting, deforestation, authority, aristocracy

Introduction: Waste as Biological Inevitability and Basic Human Practice

In a volume dedicated to understanding pre-modern perspectives on the natural world, including various forms of landscape, often foreign and forbidding, and perceptions of the plant, insect, and animal communities that inhabit them, the topic of waste also deserves attention for its enduring ecocritical significance.¹ The cur-

¹ In our own world, waste production first conjures up images of mountainous piles of trash in forlorn spaces that exist largely out of the purview of more fortunate and privileged citizenry. However, anthropologists, sociologists, historians, and economists find multiple economies, resources, and other revelations within those super-sized landfills. One foundational study of our modern throwaway habits is by William L. Rathje and Cullen Murphy, *Rubbish! The Archaeology of Garbage* (1992; Tucson, AZ: University of Arizona Press, 2001). The growth of waste studies as a relevant topic of academic attention to anthropologists, sociologists, economists, and historians begins in the middle 1960’s with Mary Douglas, *Purity and Danger: An Analysis of the Concepts of Pollution*

rent study positions waste creation and management as fundamental and inescapable human practices that assume deep moral, economic, legal, and social significance within medieval culture and history. Recent work establishes how the concepts of waste and wastefulness resonate within Middle English literature and coalesce in the character of the “waster” as a figure deserving of additional scholarly consideration. The current study builds on those by select medieval literary scholars, especially Susan Signe Morrison and Eleanor Johnson,² who provide a

and *Taboo*, rev. ed. (1966: Oxford: Routledge and Kegan Paul, 1984). Building on that foundational work, additional groundbreaking studies from decades past, including K. A. Gourlay, *World of Waste: Dilemmas of Industrial Development* (London and New York: Zed Books, 1992), and Susan Strasser, *Waste and Want: A Social History of Trash* (New York: Metropolitan Books, Henry Holt, 1999), likewise provide influential insights into waste economies and behaviors from past eras. A more recent study by Kate O'Neill, *Waste* (Cambridge: Polity Press, 2019), explores the global economy centered around the production, transportation, and commodification of trash within our late capitalist, “throwaway” society. Additional contributions to the field of “waste studies” include the work of Sabine Barles, “History of Waste Management and the Social and Cultural Representations of Waste,” *The Basic World Environmental History*, ed. Mauro Agnoletti and Simone Neri Serneri (Heidelberg: Springer Verlag, 2014), 199–226, DOI:10.1007/978-3-319-09180-8_7; further, Martin O'Brien, *A Crisis of Waste?: Understanding the Rubbish Society* (New York and London: Routledge, 2007), identifies (here, 1) both waste creation and management identified as “central elements of how societies are constructed.” Finally, numerous works by Nicky Gregson over the past two decades culminate in his most recent study *The Waste of the World* (Bristol: Bristol University Press, 2023), which offers another detailed exploration of contemporary waste behaviors.

2 See Susan Signe Morrison, *The Literature of Waste: Material Ecopoetics and Ethical Matter* (New York: Palgrave Macmillan, 2015); eadem, *Excrement in the Late Middle Ages: Sacred Filth and Chaucer's Fecopetics* (New York and Basingstoke: Palgrave Macmillan, 2008); and eadem, “Reading Waste in the Anthropocene,” *The Cambridge Companion to Environmental Humanities*, ed. Jeffrey Jerome Cohen and Stephanie Foote (Cambridge: Cambridge University Press, 2021), 229–40. See also Eleanor Johnson, “The Poetics of Waste: Medieval English Ecocriticism,” *PMLA* 127.3 (May 2012): 460–76; and Eleanor Johnson, *Waste and the Wasters: Poetry and Ecosystemic Thought in Medieval England* (Chicago: University of Chicago Press, 2023). Of particular significance is Johnson's identification of “waste,” here 6–7, as an “ecosystemic infraction,” defined as “an action that affects an entire system of things and organisms” and has “consequences beyond the wasters themselves,” with late medieval English poetry serving as “the most important archive of concerted ecosystemic thought.” She identifies the Black Death, the “Little Ice Age,” and persistent food insecurity and social unrest as the key factors that contribute to the emergence of the idiom of “waste” as the key discursive feature in late medieval England. For a pair of collections that likewise consider the relationships between humans and their ecosystems in closely associated idioms, see *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe*, ed. Barbara A. Hanawalt and Lisa J. Kizer (South Bend, IN: University of Notre Dame Press, 2008); and *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature: Explorations of Textual Presentations of Filth and Water*, ed. Albrecht Classen. *Fundamentals of Medieval and Early Modern Culture* 19 (Berlin and Boston: Walter de Gruyter, 2017).

conceptual framework for understanding the theme of waste and the figure of the waster as ecocritically-significant tropes in later middle English literature.

For the present study, the poem *Wynnere and Wastoure* (ca. 1350) presents the allegorical figure of the “waster” as a direct and vivid pretext for the current discussion, engaging with the theme of waste in exploring networks of social and natural relationships, in expressing reservations against select aristocratic behaviors toward the landscape and the non-human world, and in critiquing other patterns of excess and profligacy seen as counterproductive to larger communal aspirations. Langland’s *Piers Plowman* likewise considers the topic of waste as a key concern within its allegorical contrasting of those “winners,” defined by their diligent and communally-minded labors with “wasters,” defined by their gluttonous and slothful habits: “In settyng and sowynge swonken ful harde, / And wonnen that thise wastours with glotonye destruyeth” (“At setting and sowing . . . they sweated right hard / And won that which wasters by gluttony destroy,” 20–21).³ Langland also engages with the theme of waste more directly in Passus 6 of the A-text, treating the topic in more overt economic terms, aligning it with the misuse of agricultural yields, immoderate personal economies, habits of gluttony and indolence, and dysfunctional relationships with social and spiritual authority.⁴ Here his allegory portrays the “waster” as one prone to “wasten þat men wynnenn wiþ trauaille and wiþ tene” (“waste what men win with travaille and trouble,” (6.133).⁵ In this way, Langland confirms the theme’s significance with Piers’s replies to the waster, a defense of diligent labor and dutiful observance of natural rhythms and cycles that serve larger communal

3 This juxtaposition reflects an ordering habit of defining categories by imposing conceptual boundaries on and by determining oppositions between them: male-female, faithful-infidel, pure-impure, legitimate-illegitimate (i.e., in genealogical senses relating to marriage and child-birth), dirty-clean, etc. As described by Morrison, *Literature of Waste* (see note 2), 25: “[c]odification suggests that what is pure and what is dirty can be readily perceived,” while any indeterminate status between those two categories “threaten(s) to undermine structure and must be condemned Anything that does not cohere completely to its class – if it is mixed or tainted – is perceived as dirt (matter out of place).” In this way, the juxtaposition of Winners and Wasters as character portraits offers a crucial point of entry into understanding all manners of extravagant, exploitative, or destructive behaviors within the time period and beyond. Even so, beyond these initial polarities Johnson’s subsequent discussion establishes the mutual interdependence of the conceits of winning and wasting, a point that will be considered more fully at a later stage of this essay (see below, notes 39 and 40).

4 For a discussion of how the B- and C-texts of *Piers Plowman* continue these explorations, see Johnson, *Waste and the Wasters* (see note 2), 95–101 and Morrison, *Chaucer’s Fecopoetics* (see note 2), 150–51.

5 *Piers Plowman* A-Text in Middle English accessed online via: <https://quod.lib.umich.edu/c/cme/PPLan/1:7?rgn=div1;view=fulltext>; Modern English version accessed online via: <https://chaucer.fas.harvard.edu/pages/william-langland-c1332-c1400> (both last accessed on Jan. 6, 2024).

and spiritual benefits and stand as antidotes to destructive behaviors and soul-damaging habits of profligacy that do harm as much to the waster as to the community as a whole.⁶

Both of these allegorical poems collectively highlight the point expressed by Johnson that degenerate behaviors align with conceptions of wasting in tangible ways, as both are indicative of “a problem of resource use and distribution, a problem of waste.”⁷ More directly, however, both works help us understand the primacy of the allegorical character of the “waster” and the practice of “wasting” in distinctive ways. Johnson’s study likewise confirms that “[i]n medieval England, ‘waste’ did not mean garbage. It was primarily a behavior, so much so that the term ‘waster,’ used to describe people who habitually engage in wasteful behavior, came into currency in the period.”⁸ In their most overt characterizations, waste behaviors were depicted largely as those of aristocratic landholders engaging in unsustainable hunting practices and in the over-harvesting of native forests. These behaviors align the concept of waste with larger ecocritical themes and provide a context to read other contemporary works through that lens.

In its condemnations against excessive hunting, therefore, *Wynnere and Wastoure* (ca. 1350) aligns particularly with *Sir Gawain and the Green Knight* and in its portrayal of gratuitous deforestation it connects vividly with Chaucer’s “Knight’s Tale,” with all three works connecting unsustainable resource use with considerations about the nature of social authority and aristocratic privilege. Building in particular on the positions articulated by Johnson about the former pair of allegorical works, I argue that these two longer and more iconic Middle English poems likewise engage thematically with what Johnson refers to as “a tri-partite crisis of labor, land, and confidence in the government (that) underpins the emergence of the critical ideology of waste.”⁹ Additionally, if *Piers Plowman* and *Wynnere and Wastoure* can be said to establish a common criteria about the behaviors of the “waster,” then the respective poems of Chaucer and the *Gawain* poet (perhaps John

6 Johnson, “Poetics of Waste” (see note 2), 466, articulates the thematic relationship of these two allegories more explicitly, writing that “*Piers Plowman* picks up where *Wynnere and Wastoure* leaves off – both thematically and formally – by imagining a trial scene in far more ominous shades and by designing a personification allegory whose boundaries threaten to overwhelm any stable sense of what waste can mean, how it might be represented in a poem, and how human law might strive to curb it.”

7 Johnson, “Poetics” (see note 2), 3. For a fuller discussion of the term “ecosystemic” see Johnson, *Waste and the Wasters* (see note 2), 1–3.

8 Johnson, *Waste and the Wasters* (see note 2), 6.

9 Johnson, “Poetics” (see note 2), 4.

Stanley)¹⁰ also depict, under the auspices of expressing and maintaining select social codes and authoritative justifications (the former, principally philosophical and the latter, primarily chivalric), how that label of “waster” is assigned to Lords Bertilak and Theseus. As central authorities within their respective narratives, both qualify as “wasters” in ways modeled after their allegorical counterparts, ravaging and ruining the landscapes and forests within their domains as expressions of their aristocratic identities, and orchestrating aristocratic spectacles which are calculated to test the adherence of social subordinates to a prevailing value system that confirms and reinforces their ultimate authority. Even as both *Sir Gawain* and “The Knight’s Tale” depict the repurposing of those natural resources (game animals and forests respectively) for human ends (sport, entertainment, sustenance, ritual), both depict vivid if detached scenes of despoilation of natural settings in gratuitous detail, in degrees out of proportion to their ends.¹¹ All four works depict, in varying degrees, the values and behaviors of the “waster” as represented within an idealized aristocratic ethos, with its distinctive habits of recreation, consumption, and dominion over nature, in ways that confirm its authoritative and institutional structures and values.

As a literary trope, a “waste” or “rubbish” imaginative aesthetic exists within any cultural or historical context but is of particular relevance within late medieval English literature.¹² In modern and developed societies most people are fortunate enough to lead lives that offer easy access to private (or semi-private) restrooms with functional plumbing, waste disposal and recycling (or repurposing) resources, and to other channels to minimize the unpleasant by-products of everyday living. Given what historians have collectively described as the fetid and miasmic character of fourteenth century English urban landscapes, and despite the eternal preoccupations with cleanliness and hygiene within them, waste management challenges eternally confronted the authoritative structures and

10 See Andrew Breeze, “Sir John Stanley (c. 1350–1414) and the ‘Gawain’-Poet,” *Arthuriana* 14.1 (Spring 2004); id., “Did Sir John Stanley Write *Sir Gawain and the Green Knight*?”, *Selim* 27 (2022): 81–113; and id., *The Historical Arthur and the Gawain Poet: Studies on Arthurian and Other Traditions*. Studies in Medieval Literature (Lanham, MD, Boulder, CO, New York, and London: Lexington Books, 2023).

11 Johnson explores the relationships between waste and colonialism, describing the repurposing of wasted landscapes to accommodate new colonizers; see Johnson, *Waste and the Wasters* (see note 2), 37–41.

12 See Martin O’Brien, *A Crisis of Waste?* (see note 1). In describing the essential character of a “waste” or “rubbish” aesthetic, he writes that “[t]he imagination of waste does not exist in a social vacuum.” (57). His study highlights the social dimensions of this aesthetic and underscores the communal dimensions associated with managing and regulating it.

municipal bodies of that world.¹³ In medieval literary works, therefore, the theme of waste (when not directly examined as an allegorical form) is likelier to hide in plain sight, existing simultaneously on the margins and in the mainstream, connected to the maintenance of social order and management of moments of instability, and therefore central to a given work's thematic ends.¹⁴

Waste Management, Social Organization, and Cultural Authority

Essential to the efforts of a given species to perpetuate itself, newly birthed survivors of all species, plant and animal alike, struggle to “beat the odds” to reach full maturity and reproduce before approaching senescence.¹⁵ Those fundamentally inefficient birth processes prove adaptable to human concepts of economy and efficiency and are so applied to the functions of a fundamental element of human community – the household. Aristotle and others offer us a means to understand how the character, substance, and habits of waste generation are matters of per-

13 Multiple historical sources reveal how the world of fourteenth-century England, particularly within its urban environs, struggled particularly in managing wastes of various kinds, developing law codes and civic infrastructures to address the overwhelming problems created by poor disposal methods and underdeveloped waste management practices. For a current concise depiction of these matters, see Kathryn Warner, *London: A Fourteenth-Century City and Its People* (Haverford, PA: Pen and Sword Books, 2022), 21–30. See also Terence McLaughlin, *Coprophilia: or, A Peck of Dirt* (London: Cassell & Company Ltd., 1971); Lynn Perrigo, “Plagues and Pollution in Medieval England,” *Social Science* 46.3 (June 1971): 133–38; Dolly Jørgensen, “Running Amuck? Urban Swine Management in Late Medieval England,” *Agricultural History* 87 (2013): 429–51; and eadem, “Modernity and Medieval Muck,” *Nature and Culture* 9.3 (2014): 225–37.

14 For an expanded discussion of this phenomenon, see O’Brien, *A Crisis of Waste?* (see note 1), 127–43. See also Johnson, *Waste and the Wasters* (see note 2), 6–9.

15 Many a biological treatise could be referenced to confirm this point, but a more eloquent explanation is found in the Pulitzer Prize-winning work by Annie Dillard, *Pilgrim at Tinker Creek* (New York: Harper’s Magazine Press, 1974; Harper Perennial, 2007, 2013). In a disturbing chapter called “Fecundity,” Dillard explores this unpleasant truth about nature: “I don’t know what it is about fecundity that so appalls. I suppose it is the teeming evidence that birth and growth, which we value, are ubiquitous and blind, that life itself is so astonishingly cheap, that nature is as careless as it is bountiful, and that with extra extravagance goes a crushing waste that will one day include our own cheap lives, Henle’s loops and all. Every glistening egg is a *memento mori*.” Dillard confirms here that nature is necessarily inefficient in ways beyond our apprehension, and in our human conceptions we apply the values of “crushing waste” to that overwhelming fight for survival by seeds and eggs, a struggle within which most non-human creatures succumbing in their infancy.

sonal or communal economy, rooted in the efficient use of resources and readily applied to household management as a concept foundational to οἶκος, *oikos*, from which the term “economic” emerges. From that goal of fit and efficient resource use its antithetical notions emerge and are captured in the abstract categories of the wasteful, the profligate, the gluttonous, and the otherwise dissolute.

Processes of waste creation and management emerge as matters of scholarly focus in the fields of anthropology, sociology, economics, and history as communal concerns requiring regulation by local civic structures. In so doing, they establish a framework for the consideration of waste within the more flexible realms of literary study as a matter likewise influenced by authoritative structures and jurisdictions.¹⁶ Attention to the majestic *Cloaca Maxima* of ancient Rome has helped historians understand the centuries-long history of sewage disposal (and the interconnected network of ancient subterranean effluent pathways that archaeologists have explored under Rome) as exercises of civic authority.¹⁷ In the deification of the Goddess Cloaca¹⁸ we see confirmation of Susan Signe Morrison’s point that “in Rome, the sewer exemplified civilization, even the sacred,” while the ineffective management of everyday waste, discard, and filth, then and now, leads to discord and a distrust of civic leadership.¹⁹ Faced with similar civic waste disposal problems but lacking the infrastructure to address them with sustained success,²⁰ medieval commentators already recognized the health implications of

16 For a detailed justification for exploring themes associated with waste in specific areas of literary study see Morrison, “Reading Waste” (see note 2), 229 and 231, where she begins with the explanation that “[t]he critical exploration of waste has emerged as a growing focus of literary and cultural analysis, responding to the following: the imminent dangers of climate change; overwhelming pollution; the global trade in garbage transgressing conventional nation-state borders; the explosion in plastic detritus infiltrating air, earth, and water in an epoch increasingly called the ‘plasticene’; and a ‘fecocene’ in which human and animal manure overwhelm waste treatment plants.”

17 See Giovanni De Feo, George Antoniou, Hilal Franz Fardin, Fatma El-Gohary, Xiao Yun Zheng, Ieva Reklaityte, David Butler, Stavros Yannopoulos, and Andreas N. Angelakis, “The Historical Development of Sewers Worldwide,” *Sustainability* 6.6 (2014): 3936–74; online at: <https://doi.org/10.3390/su6063936> (last accessed on Jan. 6, 2024). For a more generalized study, see Mark Bradley, *Rome, Pollution, and Propriety: Dirt, Disease, and Hygiene in the Eternal City from Antiquity to Modernity*. British School at Rome Studies (Cambridge and New York: Cambridge University Press, 2012).

18 See John Hopkins, “The ‘Sacred Sewer’: Tradition and Religion in the Cloaca Maxima,” *Rome, Pollution, and Propriety*, ed. Bradley (see note 19), 81–102.

19 See Morrison, *Chaucer’s Fecopoetics* (see note 2), 57–66.

20 See O’Brien, *A Crisis of Waste* (see note 1), 13–14. O’Brien offers a salient description of the unhygienic character of medieval urban England, observing that “[s]o pervasive was the stink of excrement, rotting carcasses, and offal that few ever noticed anything amiss” (13). With the ar-

unregulated waste disposal practices and the dangers posed by the filth and foul miasma and perpetuated within those noxious civic environs.²¹ Institutional entities such as estates, monasteries and hospitals²² also developed their own strategies for addressing waste management challenges,²³ while specific urban trades, each with their own particularly noxious waste outputs, prompted the growth of legal infrastructures in the emergence of Assize of Nuisance laws developed to manage the “combined piles of household, industrial, and excremental matter (that) often blocked the gutters that ran down the streets”²⁴ of late medieval London. As much as it is within our modern times, the matter of waste was an everyday concern within the medieval world that figured in both abstract and concrete realms and assumed practical, ethical, and spiritual dimensions.

rival of the Bubonic Plague in 1348, however, that distinctive cocktail of rotting and burning refuse was intensified by the high volume of corpses of the deceased, “carr(ying) its own peculiar, and fearful, odour” (14).

21 See “Epidemics and How to Avoid Them,” *Sources for the History of Medicine in Late Medieval England*. New ed. and trans. by Carole Rawcliffe (1996: Kalamazoo, MI: Medieval Institute Publications); online at: *Project MUSE* (muse.jhu.edu/book/98669), 75–81: here 76: “Fear of the stench and miasmas arising from slaughtered animals, stagnant water, and sewage gave rise to measures for public health that may well have helped to prevent infection, albeit for rather different reasons than those intended. Local authorities tried hard to eliminate the most obvious sources of ‘putrefaction,’ secure in the knowledge that they were not only making urban life less disagreeable but were also cleansing the air of potentially lethal fumes.”

22 See Felix Biermann and Katrin Frey, “Monastic Waste Disposal in the Late Middle Ages – a Subaquatic Debris and Garbage Dump at the Lakeside Lavatory of Seehausen,” *Fasciculi Archaeologiae Historicae* 32 (2019): 71–85; online at: <https://doi.org/10.23858/FAH32.2019.005> (last accessed on Jan. 6, 2024).

23 See Charles Talbot, *Medicine in Medieval England* (London: Oldbourne Book Company Ltd., 1967), 171–72.

24 See Scott L. Taylor, “*Si Odore Solo Locus Pestilentiosus Fiat*: Private Property, Public Health and Environmental Hygiene – Advantages of the English Common Law of Nuisance over the Corpus Juris Civilis,” *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature* (see note 2), 407–23. See also: “Introduction,” *London Assize of Nuisance, 1301–1431: A Calendar*, ed. Helena M Chew and William Kellaway (London: London Record Society, 1973), ix–xxxiv. *British History Online* <http://www.british-history.ac.uk/london-record-soc/vol10/ix-xxxiv> (last accessed on Jan. 6, 2024); and Janet Loengard, “The Assize of Nuisance: Origins of an Action at Common Law,” *Cambridge Law Journal* 31.1 (April 1978): 144–66; and Morrison, *Chaucer’s Fecopoetics* (see note 2), 62–63. For a more generalized discussion of the evolution of English urban waste laws see Johnson, *Waste and the Wasters* (see note 2), 40–50. In articulating the development of both legal and devotional conceptions of waste in a process of mutual evolution, Johnson, here 50, writes of the “interplay between the legally derived meanings of waste and those that predominate in devotional writings,” such that “[t]he legal evolution of waste combines with the devotional evolution of waste, so that waste can become the foundation for a sophisticated philosophy of ecosystemic entanglement in Middle English poetry.”

Waste as a Literary Construct

Ultimately, the work of scholars from multiple disciplines confirms an age-old human need to banish our everyday wastes to underground channels, dustbins, back alley pathways, urban streams, and subterranean waterways where they are in varying degrees disposed of, mined, treated, transported, or reprocessed, with those processes also figuring vitally in our imaginative conception of the idea of waste and our habit of engaging with it as a moral construct, which thereby also underscores its potential as a literary trope. To this end, Susan Signe Morrison observes that

[w]aste allows us to see the fundamental similarity among us all, just as metaphor or simile allows us to see the affinity between two things or states of being not previously perceived. In this way, waste is inherently metaphorical . . . (and) produces a perception of affinity while simultaneously disrupting through difference.²⁵

The emerging field of “waste studies” enables a conceptualization applicable to literary realms, a means to access themes and constructs appropriate to a deeper understanding of the relations between humans and nature.²⁶ Waste is defined as much by its extraordinary materiality – refuse, garbage, trash, sewage – as by its eternal potential for repurposing, creating commodity, and (re)generating wealth, and also by its vexing indeterminacy as a “moral shibboleth of programmed insatiability and disposability.”²⁷ To that end, we are inherently biased to believe that a disheveled space reveals a disturbed spirit.²⁸

In the ancient and medieval worlds, when most of the population lived at a subsistence level, the concepts of waste and consumption were ongoing matters of moral reflection and debate, with portrayals of waste and profligacy invoking subtle if harsh condemnation. In the “Ages of Man” poems by Hesiod and later, Ovid, both narratives portray a decline toward conflict, degeneracy, and despoiled landscapes laid waste by human hubris and needless conflict. Emerging into Middle English in the thirteenth century, the term has its roots first in Latin and then in the subsequent Romance traditions. The range of entries in the OED confirms the heavily laden moral associations aligned with this expansive concept, doing much to broaden (and also complicate) our understanding of it as both a noun (i.e., as “trash” or “refuse”) and verb (i.e., to “squander”), and to

²⁵ Morrison, *The Literature of Waste* (see note 1), 175–76.

²⁶ See Gregson, *The Waste of the World* (see note 1), 31–51, especially 43–49.

²⁷ See O’Brien, *A Crisis of Waste?* (see note 1), 124.

²⁸ See O’Brien, *A Crisis of Waste?* (see note 1), 145; and Morrison, *Chaucer’s Fecopoetics* (see note 2), 139–41 and 146–151.

grasp its semantic relevance in both material and moral senses.²⁹ Within the literary realms of Middle English, one only needs to look to *The Canterbury Tales* to find a field of potential “wasters,” including his Monk, Merchant, Summoner, Pardoner among the most profligate and avaricious, each capturing Chaucer’s habit of “us(ing) excrement for signaling illicit greed for money.”³⁰ These figures stand out among a motley collection of other ethically questionable pilgrims within a narrative fabric where “[r]eferences to excrement, the body’s product, are unusually frequent.”³¹ From those multiple points of origin, we see that later English writers, especially Milton, echoing the concerns of the Middle English allegorists two centuries before, considered the concepts of waste and excess in terms aligned with land use and resource exploitation.³² Milton’s depictions mirror multiple estate and landscape “improvement” (i.e., waste reduction) schemes figuring within and around the interregnum, with the morally laden (if ambiguous) term “waste” applied unilaterally to fetid swamplands or despoiled landscapes with no immediate value or discernible yield,³³ or to impenetrable wildernesses with no immediately redemptive purposes or qualities.³⁴ Ultimately, our attention to the theme of waste connects natural, material and spiritual dimensions, existing in the eye of the beholder while also offering us an unflattering but inevitable window into our humanity and existing in the realms of literature as portrayed in “waste behaviors.”³⁵ Therefore, the theme of waste is therefore accessible to liter-

29 See Oxford English Dictionary, “waste,” online at: <https://www.oed.com/search/dictionary/?scope=Entries&q=waste> (last accessed on Jan. 2, 2024). See also Johnson, “Poetics” (see note 2), 3.

30 See Susan Signe Morrison, “Waste Studies and Chaucer’s Fecopoetics: A New Paradigm for Literary Analysis,” “In the Middle: Peace Love & The Middle Ages,” October 22, 2008; online at: <https://www.inthemedievalmiddle.com/2008/10/waste-studies-and-chaucers-fecopoetics.html> (last accessed on Jan. 2, 2024).

31 Morrison, *Chaucer’s Fecopoetics* (see note 2), 103–07.

32 Milton’s *Paradise Lost* and *Paradise Regained* reveal equally how the concept of “wastes” and “wastelands” figures vitally in his portrayal of Underworld and Purgatorial landscapes, and their juxtaposition contrasts purposefully with the verdant and paradisaical garden of Eden. To “improve” these “wastes” was to rescue them from states of torpid uselessness and to reorient them toward human sustenance, industry, and purpose. See Warren Tormey, “‘Eden rais’d in the wast Wilderness’: Post-Postlapsarian Landscaped in *Paradise Regain’d*,” *Critical Insights: Paradise Lost*, ed. Robert C. Evans (Amenia, NY: Grey House Publishing – Salem Press, 2019), 82–101. See also Johnson, *Waste and the Wasters* (see note 2), 162–63.

33 For a discussion of the term as applied specifically to “wastelands” – described as despoiled, impenetrable, forbidding, or simply foreign landscapes – see Marialuisa Caparrini’s essay in this volume.

34 Vittoria Di Palma, *Wasteland: A History* (New Haven, CT: Yale University Press, 2014), 10.

35 See O’Brien, *A Crisis of Waste?* (see note 1), 179, where he explores this concept in fuller detail: “[t]o waste is to engage in a complex social process characterized by diverse social meanings

ary scholars across a multiple range of specializations who apply the insights of sociologists, historians, and especially ecocritics to the study of literary texts, and to literary critics who appropriate and adapt those insights to the study of narratives, symbols, characters, and themes.

Wynnere and Wastoure

In literary realms the theme of waste likewise goes beyond simplistic condemnations of excess, extravagance, spoilage, or misspent purpose, even as these themes figure in allegorical depictions of the “waster” character. The concepts of waste and excess from the fourteenth century first associate with an overt range of communal concerns including landscape conservation, land use, productivity, and profit, while the debates over the character of fit authority assume more general and malleable forms. To this end, the allegorical poem *Wynnere and Wastoure* engages with the theme of leadership by juxtaposing relative senses of impulsive youthfulness and sober maturity in a political allegory that examines the characteristics of fit kingship. At its most basic level, the poem asks us to consider the characteristics of the “waster,” and to engage with the question of what, exactly, is “wasted.” The poem is thus described by Victoria Flood as “[a] debate between two allegorical figures representative of economic principles, Wynnere (the aggregation of wealth) and Wastoure (expenditure), (and) the poem brings the suit of each against the other for arbitration before the king of England, who must choose between the virtues of winning and wasting.”³⁶

Figuring heavily into that debate is the portrayal of gluttony, on display as Wynnere principally criticizes Wastoure’s hunting and feasting habits with Wastoure replying with arguments to refute his adversary’s uncharitable stinginess, proclaiming that “[w]ith oure festes and oure fare we feden the pore” (“[w]ith our feasts and our fine fare we feed the poor,” 295).³⁷ He then contrasts his “trickle down” charity that justifies his extravagance with the parsimonious

and social practices, orchestrated through multiple networks and institutions, revealing desire, spirituality, and beauty as well as profits, resources, and commodities. To rubbish society, then, is to install this fundamental quality of our connection to the wastes we produce and consume as a central and necessary dimension of social organization.”

³⁶ Victoria Flood, “*Wynnere and Wastoure* and the Influence of Political Prophecy,” *The Chaucer Review* 49.4 (2015): 427–48; here 427–28.

³⁷ *Wynnere and Wastoure* (online edition); Middle English passages referenced from: <https://d.lib.rochester.edu/teams/text/ginsberg-wynnere-and-wastoure>; modern English translations taken from: <http://wpwt.soton.ac.uk/trans/winner/wintrans.htm> (last accessed on Jan. 21, 2024).

spendthriftiness and uncharitable self-centeredness shown by shown by Wynnere and his privileged ecclesiastical associates whose wealth and resources are “here ben hoderde and hidde and happede in cofers, / That it no sonn may see thurgh seven wyntter ones” (“heaped up and hidden, and hoarded here in chests / So the sun cannot see it once in seven years,” 298–99) to the neglect of the needy and impoverished, held instead for extravagant friars who “it feche when thou fey worthes” (“collect it when you lie on your death-bed,” 300), who use the transferred wealth to decorate their ecclesiastical chambers. In Wynnere’s subsequent reply, he points out that the excesses shown in Wastoure’s feasting bring no sense of satisfied surfeit, but rather a state of upset that likewise compromises his ability to think with the clarity required of a fit leader. Describing an impressive three course array of dishes (327–57) that contrast with his own modest dietary habits, he confirms the exercise in gluttony in proclaiming that “iche a segge that I see has sexe mens doke” (“every man I see has six men’s share,” 337) – and laments that “that tenys myn hert / To see the borde overbrade with blasande dis” (“it troubles my heart / To see the board overspread with splendid dishes,” 341–42). Ultimately, Wynnere argues that the display of wealth and overconsumption reflected in the rich display of wealth and captured in the feast works to the detriment of the feasters – and compromises the health of their community – by draining their purses and agitating their insides with “That sothe bot brynneth for bale your bowells within” (“a sum to make your stomach churn with anger within,” 357), thereby limiting their ability to serve effectively as its leaders.

As much as Wastoure displays the rhetorical flourish to justify his feasting habits, Wynnere also laments the former’s overuse both of wooded resources, overharvested and gradually laid bare, and his untoward profiting from “sellyn wodd aftir wodde in a wale tyme, / Bothe the oke and the assche and all that ther growes” (“[s]ell(ing) wood after wood within a short time, / Both the oak and the ash, and all that grows there,” 396–97). Wynnere also condemns Wastoure’s habit of over-hunting the game within those groves to the point of extinction, profligate habits contrasting with those of his sustainably-minded forefathers who “In iche holt that thay had ane hare for to fynde, / Bryng to the brod lande bukkes ynewe / To lache and to late goo” (“In every forest they had, to hunt for a hare, / And bringing to the broad park bucks in plenty / To catch and let go,” 404–06). All of the wealth and resources of Wastoure and his aristocratic cohorts are ultimately squandered, “Wastes alle wilfully, your wyfes to paye” (“Wasted quite willfully, just to please your wives,” 408). Through the course of this dialogue, readers are encouraged to see how Wastoure’s excesses, both at table and within his fielded and forested reserves, are out of proportion to the resources available to serve larger communal benefits, finding in those consumptive behaviors an example of one ill-suited to

leadership and unfit to display the gravitas and even-temperedness of kingship. Ultimately, the manuscript is incomplete and any final resolutions remain unknown, a detail that serves to highlight not any definitive conclusion to the argument but instead the respective characteristics of the allegorical figures who participate in it.

As Johnson's subsequent discussion reveals, however, beyond their obvious contrasting values and behaviors, the winners and the wasters do not simply reflect the codified polarities which conventionally distinguish waste from its opposites in basic binary terms.³⁸ Instead, winners and wasters are symbiotic and mutually interdependent, and are prone to engage in mutually destructive behaviors. Put simply, they exist as different sides of the same coin as members of the landholding aristocracy who have both the means to conserve any excess of their resources (i.e., to "win") for personal or familial benefit and the agency to do with their lands as they please with scant regard for long-term consequences (i.e., to "waste"), both behaviors compromising any larger benefits to be realized with a more socially equitable distribution of resources.³⁹ Its final sentences confirm the poem's comment on the nature of authority, with each voice bidding the other to take action contrary to its nature – with Wastoure leading an armed contingent overseas to enjoy renown and extravagance and Wynnere relocating to Cheap-side to live in a space of more modest communal resources. With the poem's ultimate resolution unknown, in this premature outcome both figures signal an interdependence that exists beyond their obvious polarities, and both confirm the connections between winning and wasting as expressions of social capital. Finally, both figures ultimately condemn, enable, and reinforce the worst land-ravaging excesses of the other.⁴⁰

However, that premature endnote rings discordant. Buoyed by his wealth, Wastoure positions himself as a leader of knightly warriors in overseas campaigns and so gets the last word in this incomplete work, confirming its central theme about the nature of leadership while implying that he has bought the allegiance of

38 See Morrison, *Literature of Waste* (see note 2), 17–27.

39 Johnson, *Waste and the Wasters* (see note 2), 76, argues subsequently that the poem's portrayals of both "winning" and "wasting" evolves beyond those dichotomizing polarities, explaining that "[t]he poem's overlaid meditations suggest . . . first, that material and energetic resources are not truly distinct and, second, that no resources are the exclusive property of a single party."

40 Johnson, *Waste and the Wasters* (see note 2), 76, observes that "winner represents an aristocrat who looks around England and sees that other aristocrats – like Waster – are depleting and selling off their own lands and impinging negatively on the lands around them, to the overall diminution of available, arable, usable land in England. Winner's shrillness in his condemnations of Waster originates in his awareness of the fragility, the vulnerability, and the irreplaceability of the English agricultural ecosystem."

his followers by his own “wasting” – providing them with wealth, adventure, and standing and also hinting at the precariousness of such ill-gotten authority. As Johnson concludes, both *Piers Plowman* and *Wynnere and Wastoure* “marshal poetry as a resource for examining the wasteful behaviors of an increasingly consumerist, labor-averse, and individualistic world. More important, they marshal poetic resources as a means for synthesizing and forming an ideology of waste and its consequences for human society.”⁴¹ Both poems also provide a means to understand the resonance of “waste” and the figure of the “waster” within two better-recognized works from the Middle English corpus, each portraying figures in authority as being “wasteful” in both overt and nuanced ways,⁴² which we now consider.

Sir Gawain and the Green Knight

Pledging to establish that “of Bretaygne kynges, Ay watz Arthur þe hendest” (“of Britain the kings, ever was Arthur highest,” I.2.24–25),⁴³ the narrator of *Sir Gawain and the Green Knight* proceeds to paint a rich picture of a prolonged Christmas celebration, full “rych reuel oryzt and rechles merpes” (“right ripe revel and reckless mirth,” I.3.40), where “fayre folk in her first age” (“fair folk and in their first age,” I.3.54) experience all that is appropriate for privileged young people in the prime of life to enjoy a ‘round-the-clock celebration that includes jousting, dancing, and song. The most polished and sophisticated members of the Arthurian court, their aristocratic lineage stretching back to the Fall of Troy, these figures reflect the highest visions of their chivalric world as they celebrate their holiday revels fully certain of the rightness of their doing so (I.3.50–59). The revels serve to highlight the material comforts of those royal environs, with the noble knights in their finest armor and the ladies attired in their most magnificent finery within a space where no appetite goes unfulfilled and no thirst unquenched and fully embodying the best possibilities of chivalric culture. While readers are soon to learn of the discordant notes beneath the surface of

⁴¹ Johnson, “Poetics of Waste” (see note 2), 473.

⁴² In this regard we recognize O’Brien’s point that “[t]he idea that people’s understandings of and relationships with waste boil down simply to some kind of programmed insatiability and indifference built into consumerism is far too simplistic. Waste is important culturally and personally as well as industrially and socially,” providing a crucial index in the effectiveness and efficacy of political structures. See O’Brien, *A Crisis of Waste?* (see note 1), 6.

⁴³ *Sir Gawain and the Green Knight*, Middle English passages referenced from: <https://quod.lib.umich.edu/c/cme/Gawain/1:3?rgn=div1;view=fulltext>; Modern English translations referenced from: https://www.poetryintranslation.com/PITBR/English/GawainAndTheGreenKnight.php#anchor_Toc178583490 (both last accessed on Jan. 21, 2024).

that world, notes that alert us to the material excesses that underpin that culture, we are first drawn into that portrait of the world of medieval nobility and are not troubled by the spirit embodied in the youthful Arthur's aristocratic displays of extravagance (I.5. 85–89). Instead, we are treated to visions of aristocratic idealism and indulgence that endure across the centuries and shape within our modern imaginations a vivid picture of the consumptive habits of late medieval England. They capture the finest character of a chivalric society that the Green Knight's intrusion soon disrupts, an extravagant and idealized world described with appropriate detail, with only the narrator's off-hand remarks on the youthfulness of the holiday revelers suggesting any larger overtones of wastefulness and profligacy.⁴⁴ In this way that opening scene establishes an important contextual backdrop for the moral journey that Gawain is soon to undertake.

An unruly green provocateur soon intrudes and ruins the Christmas revelries with his threatening challenge. A cynical reading of the poem (i.e., such as the one focused on the matter of waste and the figure of the “waster” offered here) might begin by recognizing Gawain as a young man who has gotten himself in over his head. Highlighting the surprise of the others when he speaks up to volunteer himself to exchange blows with the ghastly green intruder who has cast a pall over the holiday revelries at Arthur's court. Moreover, the narrator draws attention to Gawain's greenhorn status as the king's nephew and the newest member of the esteemed circle, where the untested knight conveys his own awareness of his callow youthfulness as “wakkest” and “of wyt feeblest,” (“weakest” and “feeblest of wit,” I.16. 354), confirming his lesser status within it. With his successful blow severing the Green Knight's neck Gawain sends his adversary's head tumbling to the floor, soaking the Green Knight with a bloody shower (I.19. 424–26); but with the latter's quick gathering of it and subsequent departure the narrative then reorients itself to the vision of Gawain's overcoming that sense of youthful immaturity and mandate to realize a more purposeful chivalric ethos. Only later do readers learn of the rottenness at the core of that idealized world, but that first impression endures as Gawain embarks upon his grueling wilderness travels and arrives, almost a full year later, at the gates of Hautdesert, itself an ephemeral if welcome beacon of civility revealing itself within a cold and forbidding waste wilderness.⁴⁵

There he is quickly brought into an equally refined chivalric world as a valued guest, and by Fitt III he is comfortably ensconced and is enjoying the best

⁴⁴ Johnson, *Waste and the Wasters* (see note 2). 131–32.

⁴⁵ See Gillian Rudd, *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester: Manchester University Press, 2007), “Wilds, Wastes, and Wastelands,” 91–132, especially 91–93 and 109–26.

hospitality of the still-unnamed Lord and Lady Bertilak. Even as Gawain's adventures serve as the centerpiece of the poem's narrative structure, our ultimate focus here is directed toward Bertilak, the Lord of Hautdesert, who from his first intrusion into the idealized world of Arthur's Camelot, authors and orchestrates the events to follow and comes to embody the most wasteful behaviors that shape Gawain's ethical travails. Of course, readers are also introduced to Arthur's half-sister Morgan and soon learn of her behind-the-scenes manipulations and her efforts to expose the rottenness at the core of that idealized world, a process begins as Gawain pledges to return whatever gifts come his way as he stays behind while Bertilak and his men go on a series of hunts. With those themes, essential to the poem's *Bildungsroman* narrative, thus established, its focus turns to describing Gawain's dutiful preparations for his return encounter, his growth by trial, and the foreboding imperative to keep his oath – all according to Bertilak's orchestrations.

Of particular importance to our considerations of “waste” and “wastefulness” here are the purposefully graphic hunting scenes of Fitt III, which expand our awareness of Gawain's moral and experiential maturing as he confronts his doubts and resists the increasingly passionate advances of Lady Bertilak. These scenes initially suggest that with its insistence on the maintenance of ritual elements and protocols that confirm aristocratic standing and privilege, the medieval hunt *à force* is not inherently wasteful in its own right, nor are the hunters de-facto “wasters” in the most vivid senses of the term. Further, these hunting scenes are indicative of what Jeffery Cohen describes as the poem's “obsess(ion) with interweaving alien nature and human narratives,”⁴⁶ capturing in the direct incursion of humanity into that wilderness a replication of its attendant social hierarchies. Thus, the hunts capture what Susan Crane describes as a “conspicuous consumption of resources (that) further mirrors aristocratic life” and “a mimesis of social hierarchy and aristocratic authority even over nature” in their complex staffing requirements and protocols.⁴⁷

Even as Bertilak's hunts reflect these specified and encoded rituals across the progress of Fitt III, the three hunts in themselves show an unfolding pattern of degeneration ultimately into an exercise of wastefulness and of gratuitous killing for its own sake – a waste of nature and a production of waste. Meanwhile, Bertilak himself is shown out hunting various prey in a series of graphic and to modern readers, perhaps gruesome descriptions of their taking and breaking, and

46 See Jeffrey Jerome Cohen, “Inventing with Animals in the Middle Ages,” *Engaging with Nature*, ed. Hanawalt and Kizer (see note 2), 39–62; here 44–45.

47 See Susan Crane, “Ritual Aspects of the Hunt *à Force*,” *Engaging with Nature*, ed. Hanawalt and Kizer (see note 2), 63–84; here 69.

these scenes parallel the young knight's waning resolve in response to Lady Bertilak's advances, a deterioration soon marked by his acceptance of the life-saving girdle. Realizing a means to self-preservation in light of his impending fate, he commits a minor moral transgression in accepting this gift and then not returning it to his host later. In this way Gawain's observance of chivalric virtue, captured in his oath to Bertilak, supersedes any instincts toward self-preservation that he might have. In short, his life is deemed less valuable than that code, fit for wasting in service to what the oath had demanded. When exposed, humbled, and later wounded because of that transgression, Gawain also fails in demonstrating proper remorse and humility. Instead, he embarks upon a fulminating and rather unseemly rant about how he'd been duped by yet another manipulative woman after the fashion of established biblical and historical patterns. Expressed in the aftermath of his disgrace, his rant leaves readers wondering what satisfactory resolution, if any, can be flushed out in Gawain's unfortunate travails that leave him scarred, morally, figuratively, and literally, for life. Some readers might be inclined to wonder whether all those experiences – painstakingly ordered and arranged by Lord Bertilak – were perhaps for naught – i.e., wasted on an immature and possibly unfit exemplar of an unrealistic chivalric ethos?

That purposefully oversimplified and dismissive description of *Sir Gawain and the Green Knight* deliberately suppresses its best aspects as a signature Middle English narrative, purposefully overlooking more charitable interpretations of Gawain's character in order to highlight its engagement with the themes of waste shown in Bertilak's hunts. Indeed, the initial prospect of three highly organized and ritualistically sophisticated hunts across three days might itself seem excessive as an aristocratic recreation, even if they are appropriate to the narrative requirements of Fitt III as a whole and purposefully juxtaposed with Gawain's waning resolve in his effort to resist Lady Bertilak's "hospitality" in those steamy bedroom scenes. In themselves, however, the depictions of the hunts suggest also that Lord Bertilak has both ample leisure time to enjoy these elaborate (and presumably costly, in terms of time, effort, and resources) aristocratic exercises that require an intensive and highly choreographed coordination of human and canine effort to be successful.

Those hunting scenes, individually and collectively, might strike modern readers as wasteful and excessive in themselves, depicting both the intensive bloodshed of the hunt itself and then graphic and thorough protocols of "breaking" (or unmaking) of the taken game animals. The *Gawain* poet seems to ask readers of the poem, perhaps unfamiliar with the ritualized significance of the hunt, if it is really appropriate to celebrate the dismemberment of each slain animal to its most miniscule detail? Ultimately, the answer is yes. In her careful reading of the scenes in their entirety, Anne Rooney confirms the *Gawain*-poet's "debt

to his models for features of style and narrative structures, and the scope of his originality.”⁴⁸ The scenes reflect highly choreographed and coded patterns of aristocratic protocol while only through a modern lens do we sense growing hints of a pattern of wastefulness shown by Bertilak and his charges. Within those three hunting scenes that juxtapose Lady Bertilak’s attempts to draw the idle Gawain into a state of compromised seduction, her Lord leads the chase and performs the killing (III.47 1150–77), and then orchestrates a breaking/undoing ritual that is then described in precise detail (III.53–54, 1319–71) and according to established protocols detailed in a field of contemporary hunting manuals with a “quite startling”⁴⁹ degree of alignment.

Speaking specifically of the first scene, Rooney observes that while some variations are notable “it seems that the Gawain-poet’s version reflects the current practice with a reasonable degree of accuracy.”⁵⁰ Roused by beaters, the male deer are led toward the safety of higher hunting grounds while the does are “dryuen with gret dyn to þe depe sladez” (“driven with great din to the deep coves,” III.47, 1159) where the hunters shoot arrows that “þat bigly bote on þe broun with ful brode hede” (“that bit into brown flanks, with broad blade-heads,” III.47, 1162) as a first wave of hounds rush forward. Those deer escaping are met by a second wave as all were “toraced and rent at þe resayt” (“dragged down and rent by the new reserves,” III.47, 1168) in an effective display of hunting skill and field cohesion. Once the prey is taken, the undoing ritual proceeds according to protocols to reward all key participants beginning with the initial penetration into the slain animal’s entrails:

Syþen þay slyt þe slot, sesed þe erber,
 Schaued wyth a scharp knyf, and þe schyre knitten;
 Syþen rytte þay þe foure lymmes, and rent of þe hyde,
 Þen brek þay þe balé, þe bowelez out token
 Lystily for laucyng þe lere of þe knot;
 Þay gryped to þe gargulun, and grayþely departed
 Þe wesaunt fro þe wynt-hole, and walt out þe guttez.

[Then they slit the slot, and seized the first stomach,
 shaved it with sharp knives, and knotted the sheared.

48 Anne Rooney, *Hunting in Middle English Literature* (Woodbridge, Suffolk: Boydell and Brewer 1993), 159. The Gawain-poet’s depictions, she explains further (here 165), are based upon “[n]ot only an awareness of literary tradition, but intimate familiarity with the procedures of the hunt that the Gawain-poet demonstrates in his hunt scenes. The minute and clear detail with which he describes, doubtless enthralling to the medieval reader who shared his enthusiasm for the chase, is an important part of his use of the hunt.”

49 Rooney, *Hunting in Middle English Literature* (see note 48), 170.

50 Rooney, *Hunting in Middle English Literature* (see note 48), 170.

Then lopped off the four limbs and rent off the hide,
 next broke they the belly, the bowels out-taking,
 deftly, lest they undid and destroyed the knot.
 They gripped the gullet, and swiftly severed
 the weasand from the windpipe and whipped out the guts, III.53, 1330–37].

From there the unbreaking proceeds in graphic detail (III. 53–54, 1338–57) with each of the contributors rewarded with the assigned cut of meat appropriate to their rank, with firstly the spine, and then the haunches, flanks, and ribs distributed with “[v]che freke for his fee, as fallez for to haue” (“every fellow taking his fee as it fell to him,” III.54, 1358). Finally the innards are awarded to the expectant hounds, again according to custom: “[v]pon a felle of þe fayre best fede þay þayr houndes / Wyth þe lyuer and þe lyztez, þe leþer of þe paunchez, / And bred baped in blod blende þeramongez” (“On a skin of the fair beast fed they their hounds / with the liver and lights, and the stomach lining, / and bread bathed in blood blent there among,” III.54, 1359–61). With that happy and highly choreographed outcome the first day’s hunt is deemed a rousing success, with the poem’s original audience likely thrilled by the detailed account of the events and protocols.⁵¹ In its entirety, then, this first hunt begins with a purposeful and deliberate description of the pursuit, killing, and breaking (or “unmaking”) of the deer,⁵² that most noble and desired of the game animals. The scene serves ultimately to place the hunt, the hunters, and their prey in the most positive and favorable light as bona fide contributors to the exercises and fully aware of the aristocratic protocols and rituals associated with them.

The highly meticulous observance of aristocratic protocol shown in this first day’s hunt is purposeful, providing a basis of comparison by which the subsequent scenes can be understood as less purposeful and more wasteful, a decline that mirrors the efforts of the bed-sitting Gawan himself to maintain his resolve toward Lady Bertilak’s ongoing advances. With the next day’s hunt the prey is the

51 See Rooney, *Hunting in Middle English Literature* (see note 48), 168–69. Rooney’s discussion here notes not only the social hierarchies encoded on the hunt’s rituals, but also the martial associations and spiritual allegories that poets and writers aligned with these noble pursuits despite their graphic horror. Here, “the scene of slaughter is depicted with sensitivity to the fear and suffering of the dear. It is probably unlikely that the repulsion a modern reader feels at this point would have been fully shared by a medieval audience, but we may envisage an ambivalent or dual-aspected response, which both recognizes the savagery of the carnage and appreciates and imagines the ‘joy’ (line 1176) of the hunters.”

52 For a more detailed description of the process and social implications of the breaking and distributing ritual of venison see Naomi Sykes, “Taking Sides: The Social Life of Venison in Medieval England,” *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. Aleksander Pluskowski (Oxford: Oxbow Books, 2007), 144–55, especially 144.

powerful and frightening boar, known for his fierceness and his willingness to confront his pursuers. This chase and subsequent breaking is likewise thrillingly and graphically described, also leaving little to the imaginations of more squeamish modern (and non-hunting) readers of the poem (III. 56–58, 1421–75 and 1561–1617). In contrast to the deer hunt on the previous day, this particular chase comes across as more dangerous and more chaotic, with the fated boar endangering and terrifying the mounted and pursuing hunters and killing some of their unfortunate hounds also while testing the skill and mettle of the terrified archers to an even greater degree:

On þe sellokest swyn swenged out þere,
 Long sythen fro þe sounder þat sized for olde,
 For he watz breme, bor alper-grattest,
 Ful grymme quen he gronyed; þenne greued mony,
 For þre at þe fyrst þrast he þryȝt to þe erþe,
 And sparred forth good sped boute spyt more

[a most splendid boar it was, rushed out there,
 solitary through age, long split from the herd,
 but he was still mighty, the greatest of boars,
 full grim when he grunted. Then grieved many
 for three hounds at first thrust he felled to the earth,
 and sped him forth at great speed all unscathed, III.57, 1439–44].

The fierce boar, “braynwod for bate” (“maddened by baiting,” III.58, 1461), lunges at his pursuers in a final surge and leaves his mark: “[h]urtez hem ful heterly þer he forth hyzez, / And mony arȝed þerat, and on lyte droȝen” (“he rushes the men, / hurts them full heavily as forth he hies, / and many were awed at that and drew backwards,” III.58, 1461–64). With the beast having at long last been finally cornered, the scene rather abruptly returns to Gawain’s bedroom where he continues to resist Lady Bertilak’s increasingly earnest entreaties. Meanwhile, Bertilak then courageously (and perhaps foolishly) dismounts his steed and rushes in for the kill on foot, wielding his sword mightily to bring the prey down: “as þay mette fyrst, / Set sadly þe scharp in þe slot euen, Hit hym vp to þe hult, þat þe hert schyndered, / And he zarrande hym zelde” (“as they first met, / set the sharp point firm in its chest-hollow, / hit him up to the hilt, so the heart burst asunder / and he yielded him snarling,” III.63, 1592–95). Bertilak’s skill and courage are on full display as he sends the mortally wounded boar to his end and into a nearby river, where his men and his hounds move in to finish the killing.

This important detail serves therein to show that “the Gawain-poet leaves behind his hitherto realistic depiction to follow instead a thread of literary tradition with little or no basis in fact,” thus “divorc(ing) Bertilak from the realm of the

limited real hunter to place him amongst the ranks of literary hunters.”⁵³ Once again the breaking process is described in graphic and historically accurate detail, with the boar decapitated and its meat apportioned, and the hounds properly rewarded, again according to custom, with the fallen animal’s entrails (III.63–64, 1581–1622). To this point, it is important to stress that the two hunts so far described in Fitt III show an increasing pattern of enhanced danger, chaos, and graphic detail, a growing departure from the ordered versions of the idealized and highly ritualized choreography of the hunt and the breaking as depicted in the authoritative *Livre de Chasse* of Gaston Phoebus,⁵⁴ in the earlier English manuals that predate it, and also those slightly later manuals that are based upon Gaston’s popular and widely disseminated continental source. Ultimately, “[t]he boar hunt differs from the deer hunt in its significant departure to give Bertilak the traditionally heroic act of killing his boar on foot with a sword,”⁵⁵ as performed by “a wyze þat watz wys vpon wodcraftez” (“a man who was wisest in woodcraft,” III.64, 1605), but also contrasting this day’s breaking process and ritual distribution with the previous day’s, and depicting it more concisely with “the reduced detail of the undoing”⁵⁶:

Fyrst he hewes of his hed and on hiȝe setteȝ,
 And syȝen rendez him al roȝhe bi þe rygȝe after,
 Brayȝez out þe boweles, brennez hom on gleȝe,
 With bred blent þerwith his braches rewarȝez.
 Syȝen he britnez out þe brawn in bryȝt broȝe chelȝez,
 And hatȝ out þe hastletteȝ, as hiȝtly biȝemeȝ

[first he hews off his head and sets it on high,
 then rends him roughly along the ridge of his back,
 brings out the bowels, and broils them on coals,
 with bread blent therewith his hounds rewards.
 Then he breaks out the brawn in broad bright slabs,
 and has out the entrails, as is seemly and right, III.64, 1607–12].

That diminished (but still graphic) account serves to indicate another noteworthy detail that signals changes within Fitt III as a whole, with the focus turning away

53 Rooney, *Hunting in Middle English Literature* (see note 48), 174.

54 See Hannele Klemettilä, *Animals and Hunters in the Late Middle Ages: Evidence from the BnF MS fr. 616 of the Livre de chasse by Gaston Fébus* (New York: Routledge, 2015), especially 73 and 176–77. She describes there that ritual food distribution process as a key component in establishing the heavily social codes that confirm the aristocratic primacy of the hunt.

55 Rooney, *Hunting in Middle English Literature* (see note 48), 176.

56 Rooney, *Hunting in Middle English Literature* (see note 48), 176.

from aristocratic ritual and toward depictions of enhanced and more gratuitous levels of bloodshed.

That transformation from ordered pursuit to chaotic chase is shown to accelerate with the third hunt, with the famed trickster Reynard now the object of pursuit. In this final hunt the object of pursuit is named, associated with other medieval folkloric tales and with his clever habit of escaping trouble, and is so somewhat more anthropomorphized in comparison with his unfortunate cervine and porcine predecessors. Seen in this light, both medieval and modern readers are more prone to see his pursuit and slaughter differently, perhaps in a more sympathetic light, especially with the account mostly focused on the chase and less on the killing and undoing:

Renaud com richchande þurȝ a roȝe greue,
And alle þe rabel in a res ryȝt at his helez.
þe wyȝe watz war of þe wylde, and warly abides,
And braydez out þe bryȝt bronde, and at þe best casteȝ

[Reynard came rushing through the rough grove,
and all the rabble in a race, right at his heels.
The lord, aware of the wild thing, warily waits,
and brandishes his bright blade, drives at the beast, III.76 1898–1901].

In this instance it is much more a credit to the tenacity of the pursuing hounds, as opposed to the skills of the hunter, that lead to the successful result, as “[a] rach rapes hym to, ryȝt er he myȝt, / And ryȝt bfore þe hors fete þay fel on hym alle, / And worried me þis wyly wyth a wroth noyse,” (“a hound rushed at him, before ere he might, / and right before the horse’s feet they fell on him all / and worried the wily one with a wrathful noise,” III.76, 1903–05). That canine-orchestrated “undoing” effort ceases only when Bertilak “lyȝtez bilyue, and lacheȝ hym sone, / Rased hym ful radly out of þe rach mouȝes, / Haldez heȝe ouer his hede” (“swiftly alighted then and latched on, / raised him full suddenly out of the ravening mouths, / holds him high over his head,” III.76, 1906–08).

Fittingly, the sparsely detailed scene ends with the bob-and-wheel stanza’s brief conclusion, stripping Reynard of his coat and (presumably) leaving the rest of the carcass behind to rot, thus dispensing with the ritually significant undoing ritual: “Hor houndez þay þer rewarde, / Her hedeȝ þay fawne and frote, / And syȝen þay tan Reynarde, / And tyruen of his cote” (“Their hounds they then reward, / Their heads they fondle and stroke; / and then they take Reynard and strip him of his coat,” III. 761918–21). Significantly, in the aftermath of the day’s adventures, with Bertilak and his men safely returned to Hautdesert, we learn that Reynard’s pelt, newly yielded, presumed to be at least of reasonable value, and aligned with aristocratic tastes in fashion (as supported by records of impor-

tation and of the merchant skimmers company),⁵⁷ is seemingly given “with distaste and embarrassment,”⁵⁸ with one hunter (presumably Bertilak) explaining to another (Gawain) that he has “hunted al þis day, and noȝt haf I geten / Bot þis foule fox felle – þe fende haf þe godez!” (“hunted all this day, and naught have I got / but this foul fox fell – the fiend takes such goods!” III.77, 1943–44).

The slain Reynard’s pelt is regarded by the hunters as barely worthy of retaining despite its presumed currency as a potentially fashionable item; however, the rest of the animal is “apparently left behind by the hunters (lines 1920–21).”⁵⁹ To that end, the sequence of hunts proceeds from a close and strict observance of protocols in a deer hunt to a less purposeful, more disordered, and indeed, ultimately more wasteful exercise with Reynard’s demise showing meager significance in the way of ritual or commercial value.

Each of these scenes depicts the customary brutality of the hunt, likely to appeal to a medieval audience in the subsequent “undoing” or “breaking” of the animal. Each also adds authenticity in terms likely familiar to medieval readers but remains unsettling in its graphical detail to modern sensibilities. In their collective effect the scenes demonstrate a peculiar progression away from the ordered efficiency of the first cull to the more wasteful purposelessness of the unfortunate Reynard’s equally graphic “undoing” (i.e., skinning and disemboweling).

There are multiple ways, as critics have identified, of finding literary purpose in these alternating scenes, with Gawain’s guest bedroom, a den of seduction, juxtaposed with the rampages of nature by Bertilak and his men through the killing fields of the forests around Hautdesert. Further, the valuable, life-saving girdle given by Lady Bertilak to a reluctant and hesitant Gawain (III.73, 1805–09) is both contrasted and aligned with the valueless, stinking pelt of the slain Reynard that he subsequently hears about (and is presumably offered) in a scene closely following. While Bertilak’s seemingly dismissive remark here will be shown to resonate in Fitt IV, the parallel “hunts” are brought here to a close. The former, a metaphoric “hunt” in which thick romantic tensions approach multiple transgressions of chivalric courtliness, aligns with the latter, a detailed and, to modern sensibilities,

57 See British History Online, “The English Fur Trade in the Later Middle Ages,” especially “The Trade in Skins in the Thirteenth and Fourteenth Century,” <https://www.british-history.ac.uk/london-record-soc/vol38/pp57-77>; and “Fashions in Fur,” <https://www.british-history.ac.uk/london-record-soc/vol38/pp133-155>; see also The Skinners Company, “History of the Fur Trade,” <https://www.skinners.org.uk/roots-and-branches/past-links-to-the-fur-trade/> (all last accessed on Jan. 20, 2024).

58 Rooney, *Hunting in Middle English Literature* (see note 64), 178.

59 Rooney, *Hunting in Middle English Literature* (see note 64), 179.

bloody series of slaughters, culminating in the dissatisfying and ultimately wasteful killing of Reynard. Both scenes seemingly hang in the balance, ominously presaging the specter of chaos that would erupt should either Gawain's resolve or the ordered structure of the hunt crumble, with both calamities then disrupting the finely calibrated world and doing inescapable damage to the authority that Bertilak wields over the courtly scene as well as to his own reputation as a fit exemplar of chivalric ethos.

Such an outcome would fully expose the hollowness at the center of that ethos, laying bare Morgan's plans to corrupt Gawain and damage Arthur's reputation, bringing those idealized worlds of both courts to ruin. Here we might also imagine reasons to forgive the youthful Gawain who, on the brink of his fated confrontation with the Green Knight, accepts the girdle as a lifesaving talisman, a gift that presages the meeting which promises his certain death at the hands of that otherworldly green menace. In failing to disclose and return to Bertilak his Lady's gift of the magic girdle, which he has accepted believing in its promise as protection against all perils that he is destined to encounter, his moral decline is confirmed. It is possible that the violence and bloodshed of the hunting scenes, complementing Gawain's own weakening resistance to the Lady's romantic entreaties, offers an analogue to his own growing confusion and alleged moral decline. Overall, Fitt III is purposefully discomfiting, with its power residing in that discordant interplay between the tensions of the bedroom with the violence of the hunt.

However, in the violence of those hunting scenes, an understandable first reaction – especially among modern readers – is to discern a degree of carnage way out of proportion to the activities of the hunt as a ritual exercise and expression of aristocratic standing. The meticulous descriptions of killing, bloodshed and dismembering go way beyond the significance of the hunt as affirmations of Bertilak's wealth, nobility, and social capital.⁶⁰ Beyond those material components of the hunt that signal that social prestige – the hounds, the handlers, the weapons, the assembled retinue of hunters to facilitate the Lord's recreations – readers are first prone to see in the violence the discordant notes of aristocratic excess, of gratuitous bloodshed, and also of waste, as the behaviors here on display are also those of Wastoure as critiqued by Wynnere.

60 See Susan Crane, "Ritual Aspects of the Hunt à Force," *Engaging with Nature*, ed. Hanawalt and Kizer (see note 2), 63–84 (here 68), who explains that "the hunt à force is a mimetic ritual designed to celebrate and perpetuate aristocratic authority. This kind of hunting defines a miniaturized cosmos within which aristocratic ability, superiority, and governance are represented," (such that) . . . "the ritualization of hunting *endorses and validates* aristocratic skill, superiority, and governance." See also Hannele Klemetilä, *Animals and Hunters in the Late Middle Ages* (see note 54), 176–77.

Ultimately, across the whole of Fitt III we can see, running parallel with Gawain's weakening resolve, an enhanced pattern of wastefulness reflected in the violence of the kills and in the gore of each animal's undoing. If those scenes are calculated to mirror both the intensity of Lady Bertilak's entreaties and the increasingly tempted and flustered Gawain's resisting of them, they also highlight his own moral decline, borne not only of his immaturity but also of his own degenerating sense of moral steadfastness, culminating in his disquieting acceptance of the girdle and his hope in its life-saving qualities. At their most basic level, the hunting scenes align Gawain's moral decline with Bertilak's increasingly tenuous authority. The hunted animals, particularly the deer, are often associated with innocence and purity, and their violent deaths at the hands of Bertilak represent the corruption and degradation that Gawain faces as he struggles to uphold his chivalric ethos.

Toward the end of Fitt IV Gawain makes his restitution, bravely accepting the Green Knight's return blow before impulsively and angrily returning the girdle: "he kaȝt to þe knot, and þe kest lawsez, / Brayde broþely þe belt to þe burne seluen" ("caught at the knot and pulled it loose, / and fair flung the belt at the man himself," IV.94, 2376–77). Recalling the valuelessness of Reynard's "stinking pelt" from the previous Fitt, he then bewails the girdle's comparable worthlessness in proclaiming "þer þe falssyng, foule mot hit falle!" ("There's the falseness, foul may it fall!" IV.94, 2378). Next, while seemingly expressing regret for his transgression, Gawain's response also could also be read as a deflection of blame and a sign of his continuing immaturity despite the year-long ordeal that he has endured (IV. 95, 2379–84). Even as he seeks to depart with honor, Gawain rather peevishly refuses Bertilak's offer to return to Hautdesert as a newly designated ally and equal. The chastened knight then launches into his famously immature screed against Lady Bertilak and various other biblical and historical women who have led men astray (IV. 97, 2411–28), again underscoring his effort to deflect ultimate blame for his painful ordeal and his falling short within it.

For those readers looking for a mature, responsible, and self-directed version of Gawain at the poem's end, understanding of his own accountability for his actions and choices, and open to the prospects of female autonomy and female agency, that fuller version of the story remains untold. Though easily categorized as such, Gawain's story stops short of a full *Bildungsroman* narrative and exists as an incomplete version of that story of maturation. While his own story, as orchestrated by Bertilak and his associates is clearly formative, it is also embittering and literally scarring. Ultimately, readers are left with the disturbing realization that Sir Gawain needs additional trials, formative experiences, and periods of self-reflection to propel himself toward a greater sense of moral maturity. The experiences he has endured, orchestrated by Bertilak with the complicity of both

his Lady and Morgan la Fay, which have taken him to the brink of death – and that would perhaps have enhanced the moral development and sharpened chivalric ethos of a better man – haven't served him particularly well. In fact, by the story's end we might still see them as incomplete, unfulfilling, perhaps disquieting, and again – something of a waste.

Chaucer's "Knight's Tale"

A well-established critical tradition among Chaucerians is to focus on the order, structure, and symmetry of the initial entry into Harry Bailly's storytelling competition. Building on iconic critical traditions that position "the Knight's Tale" as obsessively preoccupied with narrative and thematic structuring and recognizing Theseus's relentlessly Boethian preoccupations,⁶¹ critics in recent decades have begun to acknowledge the reality embedded in key details which previously sat hidden in plain sight. In connecting this opening tale with the preceding discussion of *Sir Gawain*, and to establish a shared thematic continuity between the two works that revolves around hunting, ordering, despoliation, and, ultimately, waste and wasters, we acknowledge that "The Knight's Tale" likewise depicts the excessive ravaging of the natural world, and in its telling the tale is prone to valorize a single figure's worst tyrannical and authoritarian impulses for the purpose of maintaining an underlying philosophical justification within grandiose aristocratic spectacles.

Further, even as we recognize that his tale is subject to the recurring and purposeful authorial intrusions of its teller, we begin with the basic acknowledgment

⁶¹ To compose a list of articles that address the themes of structure and philosophical orientation of Chaucer's "Knight's Tale" is to proceed through some of the canonical "classics" of Chaucerian scholarship. The following, by no means exhaustive, includes often cited articles and chapters on the topic, arranged chronologically: Charles Muscatine, "Form, Texture, and Meaning in Chaucer's Knight's Tale," *PMLA* 65.5 (1950): 911–29; id., *Chaucer and the French Tradition* (Berkeley and Los Angeles: University of California Press, 1957), 175–90; Robert M. Lumiansky, "Chaucer's Philosophical Knight," *Tulane Studies in English* 3.3 (1952): 47–69; Paul G. Ruggiers, "Some Philosophical Aspects of *The Knight's Tale*," *College English* 19.7 (April 1958): 296–302; John Halverson, "Aspects of Order in *The Knight's Tale*," *Studies in Philology* 57 (1960): 606–21; Charles A. Owen, "The Problem of Free Will in Chaucer's Narratives," *Philological Quarterly* 46.4 (October 1967): 433–56; Thomas A. Van, "Theseus and the 'Right Way' of *The Knight's Tale*," *Studies in the Literary Imagination* 4 (1971): 83–100; James Smith, "Chaucer, Boethius, and Recent Trends in Criticism," *Essays in Criticism* 22.1 (1972): 4–32; Walter Scheps, "Chaucer's Theseus and the 'Knight's Tale,'" *Leeds Studies in English* 9 (1976): 19–34; and Ian Bishop, "Chaucer and the Rhetoric of Consolation," *Medium Aevum* 52 (1983): 38–50. This list of course omits other relevant studies and is meant to provide buttress for the alternative interpretation that I put forth here.

of the initial position of “The Knight’s Tale” as the first told after the group departs from Southwark, identified by Morrison as a space identified as a first repository of London’s filth and excrement, indeed a “metaphor for excrement, the dung heap of the city”⁶² and the beginnings of the transformative journey of the pilgrimage. In its ordered symmetry and philosophical preoccupations, and despite the wasteful behaviors to shown by Lord Theseus, the tale is distinctive for its narrative and philosophical “cleanliness” and stands as purposefully juxtaposed to the excrementally infused motifs that, Morrison argues, pervade *The Canterbury Tales* as a whole.⁶³

The tale itself begins with an aristocratic hunting scene in a forested environment. That detail allows us, as Jodi Grimes contends, to read it “in the context of medieval hunting policy and forest law” which then “helps to explain the political violence” that takes place within the forested spaces of the tale, which not only serves to “highlight the structural tensions within Theseus’s regime and to suggest an alternative model of authoritative policy,”⁶⁴ but also allows readers to understand how Theseus, like Bertilak, qualifies as a waster in both his eagerness to superimpose order on arbitrary events and upon his social subordinates, and in his impulsive habits of ravaging the natural world to achieve those ends. The tale highlights the story of two brothers turned rivals, both in pursuit of a love interest who, really, wants nothing to do with either of them. Their insistent rivalry for her becomes a years-long struggle, ritualized, sensationalized, and elevated to an arcane philosophical exercise by a controlling authoritarian who impulsively razes his forests and despoils his precious hunting groves for the purpose of staging a romantic spectacle to achieve that philosophical resolution that arbitrarily kills one rival and lifts the other to realize his claim to the still-unwilling object of his love.

Within this framework we might discern the glimpses of Chaucer the social critic peeking out behind the Knight’s emphatic and dutiful (and frequently intrusive) habits in storytelling. Those habits show the Knight’s insistence on providing full and proper, almost painstaking detail on every descriptive element as the

62 Morrison, *Chaucer’s Fecopoetics* (see note 2), 72.

63 Morrison, *Chaucer’s Fecopoetics* (see note 2), 8–11, 66–69, and 111–15.

64 Jodi Grimes, “Arboreal Politics in the *Knight’s Tale*,” *The Chaucer Review* 46.3 (2012): 340–64. Grimes explains the significance of this opening scene, noting, here 341, that “Chaucer’s use of hunting motifs accords with literary depictions of the time” and observes further that “the poet’s realistic treatment of the duke’s pursuit of the hart, or hunt à force, and his expansive, technical lexicon showcase his intimate familiarity with venery acquired in the service of avid hunters Edward III and Richard II. Moreover, Chaucer was a forester, charged in 1390 with the supervision of the North Petherton Forest.”

long and obsessively ordered narrative winds its way toward the final Boethian justifications of Duke Theseus as expressed in his famed “First Movere” speech.⁶⁵

That synopsis offers a means to understand how a critique of the habits of wastefulness shown by Theseus might lead to a fuller and contextually richer reading of not only of the tale itself, but also to the collective work of *The Canterbury Tales* as a whole. Additionally, in his telling the Knight’s frequent if self-negating interjections prompt us to reflect on his authorial presence as his tale’s teller, giving readers momentary pause and subtle prompting to see it as something more nuanced from the tightly ordered spectacle that he intends. Indeed, the Knight seemingly relishes the detail in scenes of frenzied and extravagant building and impulsive deforestation, and he consistently maintains an obsessive insistence on narrative and imagistic symmetry and order. And his narrative yields no shortage of waste: wasted wood, wasted landscapes, wasted labor, wasted sustenance, destructive excess and overconsumption – so that ultimately, through the Knight’s agency, readers are able to apprehend that Theseus guides the misuse of resources to create and orchestrates the grandiose spectacles that justify his Boethian ends while also reinscribing social and gender hierarchies on the events depicted. In what the knight intends as a valorization of that aristocratic spectacle, Chaucer seemingly critiques the consumptive habits (and wastefulness) of the leisure classes for whom such displays underscore their privilege.

Indeed, one place where the Knight’s most focused attention to narrative symmetry is on display is in Part III, where he describes first the construction of the grand amphitheater that is to serve as the site for the final duel between Arcite and Palamon and the impressive teams of warriors that both have assembled,⁶⁶ and then in Part IV with the combat spectacle itself, a contest calculated to establish which suitor has the strongest claim to the indifferent Emelye. The knight’s authorial presence regularly intrudes, firstly as he “wolde deme it negligence” to “foryete to tellen the dispenche” in describing “swich a noble theater as it was” (III. 1881–85). Insistent in his determination to detail the finest features of

⁶⁵ Scholars have long recognized the difficulties of situating “the Tale” within specific generic conventions, and it is worthwhile to include the observations of C. David Benson, “*The Knight’s Tale* as History,” *The Chaucer Review* 3(1968): 107–23; here 111: “Of course *the Knight’s Tale* is not a chronicle any more than it is a romance or epic: it is finally impossible to assign the poem to any conventional genre. Yet the similarities of technique it shares with the chronicle reveal a basic historical approach in the tale.”

⁶⁶ Theseus builds the amphitheater: *Canterbury Tales* 1881–1917 (“Knight’s Tale,” Part III, 1023–55); Middle English passages transcribed from: <https://quod.lib.umich.edu/c/cme/CT/1:1.2?rgn=div2;view=fulltext>; Modern English translations, when included, are taken from: <https://www.poetryintranslation.com/PITBR/English/CanterburyTalesII.php> (both last accessed on Jan. 20, 2024).

that amphitheater and interrupting his own account regularly to maximize their impact, he nudges readers toward the prospect of reading the scene differently than as the grandiose spectacle that he intends. In calling attention not only to the ornately symmetrical structure of the arena, a mile in its circumference and “in the manere of compass / Ful of degrees, the heighte of sixty pas” (1889–90). With its symmetrically placed “oratories thre” (1917) –Venus to the east (1903–05), Mars to the west (1906–07), and Diana “of chasitee” to the north (1909–12), all presiding over their respective gates and confirming not only the “noble wyse” (1913) of Theseus, he likewise alerts readers to his own unwavering effort to preserve the symmetrical character of his tale. Later, the knight again “for yeten(s) to devise / The noble kervying and the portreitures, / The shape, the contenance, and the figures” (1914–17) within this trio of temples – and then once again he enthusiastically renders the scene in painstaking detail, likewise calling attention to his authorial presence as he “rekned and rekne shal” (1933) and mentions details “more than I kan make of mencion” (1935) in explaining the symbolism of the décor within each oratory (1918–2088). Throughout the scene his authorial voice intrudes consistently in his descriptions to relate additional details as readers are easily led to see his enthusiasm for (and perhaps also find their patience tested with) the gargantuan display of chivalric pomp that is soon to follow as “Theseus / at his grete cost arrayed thus” (2089–90).

In these scenes, and under the twin guises of Boethian symmetry and his own confidence in the fitness of that message, the knight portrays the world of his tale as an unbound space of eternal resources, one ripe for eternal plunder and endless spectacle, and Theseus as an extravagant user of those resources. In so doing, the knight positions Theseus as a figure of unlimited resources, able to provide “mete and wages” to any “crafty man” (1897) who contributes his skill “to maken and devyse” (1901) this grand amphitheater. The principal agent destined to shape the narrative and orchestrate the spectacle, he implicates himself in the wasteful excess of these displays of aristocratic agency and extravagance. Within that world rendered by the Knight the realm of nature exists not for its own sake, but entirely within human purview. In its obsessive symmetry and order the narrative establishes an ecosystem in which waste and wastefulness are simultaneously marginalized and foregrounded, with natural resources existing entirely for human ends.

As the tale proceeds, the Knight’s continuing authorial intrusions capture his insistence on maintaining both narrative symmetry and Boethian order and highlighting the role of Theseus as an agent of orchestrating the spectacle within which Palamon, Arcite, and Emelye seek their own desired outcomes. This feature is particularly on display within the otherworldly contest that opposes Venus and Mars in apocalyptic struggle through the proxy battle of Arcite and Palamon in

the climactic Book IV. When the former unseats the latter through his fierce and cunning jousting (IV. 2652–56), he is proclaimed the winner of Emelye's hand such that "by his fortune (he) hath her faire ywonne" (2569). That resolution leads to more chaos, as Arcite falls from his horse, "pighte(s) hym on the pomel of his heed," and dies from the injuries that are caused by "a furie infernal . . . / From pluto sent at requeste of saturne" (2684–85). In the subsequent confusion that follows he is borne away, and as a means of paying hasty tribute to his loss Theseus razes a forest and sends all of the creatures within off fleeing for their lives, to build this magnificent tribute to the fallen Arcite.

In the wake of Arcite's drawn-out and dramatic demise, Theseus commissions yet another grand spectacle to mark the sober significance of the occasion. That happens in later in Part IV, when the fallen suitor's funeral pyre is likewise "not" described by the Knight (i.e., it "is" described with recurring remarks about why select details are impossible to leave out) as a consequence of the colossal deforestation effort necessary to stage it (2913–38). With that gesture Theseus completes the deforestation of his beloved hunting grove, the space firstly where the tale opened with the scene of his hunt, secondly from which he has drawn the resources to build his grandiose arena, and thirdly destroyed to stage Arcite's funeral pyre. Noting the significance of staging both "the tournament and the funeral in the grove," Grimes contends that the subsequent funeral "reinforces the idea that human conflicts also endanger the nonhuman world" while also "illustrating weakness in Theseus's regime"⁶⁷ and highlighting his destabilizing characteristics as a waster of resources. In the Knight's telling, the ritual of Arcite's immense funeral pyre seeks to provide logical justification for his chance and arbitrary death and invest it with an appropriate measure of philosophical resonance at the expense of the natural landscapes that are sacrificed to organize his grandiose funeral tribute.

The constructive energies that go into designing the extravagant arena where Palamon and Arcite do battle are essentially mirrored in the destructive energies that finally lay waste to the hunting grounds of Duke Theseus in organizing Arcite's funeral: "Heigh labour, and ful greet apparaillynge, / Was at the service and the fyr-makynge" (2913–14) details the frenzied labors of the craftsmen once again (presumably) recruited by Duke Theseus and compensated by his endless pool of resources. Those efforts enable the construction of Arcite's burial itself, a pyre of "twenty fadme of brede" (2916) that serves to pay tribute to a fallen chivalric warrior done in not by the rigors of combat or even by the dangers of competitive jousting, but rather by the less discernible vicissitudes of otherworldly

⁶⁷ Grimes, "Arboreal Politics" (see note 64), 357.

whimsy. The trees sacrificed for this tribute are named in thorough detail, including the “ook, firre, birch, aspe, alder, holm, popeler, / Wylugh, elm, plane, assh, box, chasteyn, lynde, laurer, / Mapul, thorn, bech, hasel, ew, whippetree” (“Oak, fir, aspen, birch, linden, holm, and poplar, / Willow, elm, plane, ash, box, chestnut, laurel, alder, / Maple, thorn, beech, yew, hazel, cornel-tree,” 2921–23). Likewise, the knight continues to display his intrusive descriptive habits to maintain the structure of his tale by again confirming, through his denials, his authorial presence within it: “How they weren fild / shal nat be toold for me, / Ne how the goddes ronnen up and down / Disherited of hir habitacioun” (“How they were felled – will not be told by me; / Nor how up and down their divinities run, / All disinherited of their habitation,” 2924–26). Just as the knight confirms his authorial connection to the ornate décor of the battle arena in Part III by disavowing it, he once again proceeds to “not” tell of the great destructiveness within this scene central to Part IV, in which peace-dwelling creatures of both the spirit and the living worlds alike must flee in terror “whan the wode was falle” (“when the trees were felled,” 2930) and their protective canopy removed so that “the ground agast was of the light, / That was nat wont to seen the sonne bright” (“the ground was fearful of the light / That never used to know the sun so bright,” 2931–32). Grimes sums up the Knight’s reluctant but detailed rendering of this scene by observing that

[t]he narrator’s refusal to deliberate on the characteristics of the felled trees, while listing the names of each variety, evokes the “slash-and-burn” style of warfare waged by Theseus and other autocratic rulers. The syntax of the passage compels the reader to confront the real effect of the casualties. The rapid listing speeds up the pace of the trees’ demise, the short order in which man devastates this grove.⁶⁸

Ultimately, within this rendering the Knight implies that Theseus, through his mandating of the displacement of the forest creatures whose homes have been sacrificed to commemorate Arcite’s random death at the hands of capricious gods, also confirms his mastery over the lands within his dominion and, by extension, the natural world as a whole. In rendering that scene in a manner that simultaneously affirms and negates his connection to those events, the Knight both confirms and destabilizes the authority displayed by Theseus, who lays waste to his landscapes in order to impose a Boethian justification on the events he has orchestrated.⁶⁹ In subsequently relating the spices added to sweeten the scents of the burning pyre and the many objects offered up to its flames (2945–50) to honor the fallen Arcite,⁷⁰ the Knight confirms the wasteful habits demonstrated in the

⁶⁸ Grimes, “Arboreal Politics” (see note 64), 361.

⁶⁹ Rudd, *Greenery*, “Trees” (see note 45), 65.

⁷⁰ See Rudd, *Greenery*, “Trees” (see note 45), 67.

authoritarian mandates of Duke Theseus, whose subsequent “First Mover” speech (2987–3108) seeks to apply order and provide philosophical justification and bring closure to the years-long and minutely described events that he has insistently orchestrated within the tale as a whole.

Chaucer’s Knight can be said to reside between two worlds – the outdated and stultifying codes of chivalry that defined the world of the *Roland* poet, and the real historical and economic conditions that by the fourteenth century had redefined chivalric conceits and had allegedly reduced knights to mercenary figures and profiteering proto-capitalists who realize that profit from the repurposing of natural resources toward monetary ends.⁷¹ To this end, we can further assume that in his various duties in service to the court of King Edward III, Chaucer also possessed a nuanced understanding of governmental budgeting, taxation, expenditure, income distribution, and perhaps even a more than passing acquaintance with aristocratic spectacle (which we might refer to today as commodity fetishism). With the obsessive symmetry and detail shown in “The Knights Tale,” where we find preoccupations with order, symmetry, and narrative balance, the Knight’s “reluctant” hyperbole reinforces the excesses shown by Theseus who maintains his social stature by indulging his predilections toward “wasteful spectacle.”

Despite those aspirations, “the Knight’s Tale” serves not as the ultimate thematic statement of Chaucer’s *Canterbury Tales*, but only an ordering function within it. With its thin veneers of order and structure, this first tale represents an imperfect simulacrum of *the Tales* as a whole, a first and flawed human rendering of a larger ambition, an attempt to discern the world as a reflection of divine order and structure, and an appropriation of Boethian principles to larger Christian ends. If the themes of waste, extravagance, and profligacy factor into the narrative fabric of “the Knight’s Tale” as the initial story, they are likewise repurposed within the allegorical fabric of *the Canterbury Tales* in their entirety. This opening tale ultimately offers a highly featured framing and structuring device for an interwoven collections of narratives that begins with unmistakable notes of optimism for the coming of Spring (“General Prologue,” 1–18) with all of its attendant notes of optimism and themes of rebirth, and ends with the Parson’s rather dour but thorough discourse on the theme of transcendence, a theme realized in expressions of Grace, charity, and the fit use of resources to serve humanity and nature in healthy, sustainable, and mutually reinforcing relationships.

71 One iconic study on this topic remains that of Terry Jones, *Chaucer’s Knight: The Portrait of a Medieval Mercenary*, London: Methuen, 1982, 1994, 2008, 2017. A convincing response to the matter is by John Pratt, “Was Chaucer’s Knight Really a Mercenary,” *The Chaucer Review* 22.1 (1987): 8–27.

Conclusion

It is perhaps useful to reference here the Seven Deadly sins, with the habits of waste and excess seeming firstly to align with the less severe sins of incontinence, which result from an inability to control one's passions or to maintain a sense of reserve or balance in the face of temptation. These are juxtaposed with the more pernicious sins of malice, those portrayed in Dante's lower circles of Hell and are captured in the more egregious and deliberate violations of counterfeiting, simony, and treason. The behaviors of Bertilak and Theseus portray those of powerful aristocrats exercising their power and social capital according to their positions; however, given the conceptual alignment with the "waster" figures described allegorically in *Wynnere and Wastoure* and in *Piers Plowman*, it is also possible to argue that the authors of those works were likely offering a cautionary message about the character of relations between humans and the non-human world, expressing a mandate for stewardship of that natural world across the generations. In a climate with plague and famine as resonant, if not present realities, all were expanding the conception of the concept of waste to envision a fairer and more egalitarian connection between humans and nature.

From an ecocritical vantage we might discern in the increasingly wasteful hunting scenes of *Sir Gawain* and in the spectacularly destructive deforestation of "The Knight's Tale" key themes which explore the ecocritical implications applicable to the concept of waste. We might also see in those "lesser" sins of incontinence, captured in the gratuitous destruction of nature, the equally urgent concern about how excessive resource use reflects a degree of human arrogance in our skewed interactions with the non-human world. In those later stages of Middle English literature we can discern an anxiety among writers about wasteful behaviors, degrees of excess consumption, and the impulse to find logic and maintain order in a human world that exacts its toll on the natural world. In replicating the wasteful excesses shown in both *Wynnere and Wastoure* and in *Piers Plowman*, we see those arguments developed more fully first in the obsession with chivalric spectacle in *Gawain*, which complements a moral critique about the newly emerging problem of gratuitous consumption, confined most directly within the privileged classes and captured particularly in the hunting scenes in Fitt III that initiate a corrupting pattern that figures increasingly as the poem proceeds. The obsession with order and spectacle in "The Knight's Tale" likewise offers cautionary notes about the excess and indiscriminate use of resources, matters of relevance to the medieval world and also of supreme urgency in our own.

Ultimately, this essay has sought to articulate the relationships between waste and authority as represented in the particular habits of a pair of "wasters." Bertilak and Theseus embody that connection, first identified by their destructive

habits in natural spaces, and secondly by their capacity to orchestrate grand aristocratic spectacles to justify those wasteful habits. This study has been enabled throughout in particular by Johnson's recent work *Waste and the Wasters*, and her contributions here are best captured in her observation that "waste" is defined first in the Magna Carta (1215) and carried forward in subsequent medieval legal codes: "waste is an abuse of privilege," she writes, a behavior shown among landholders of multiple types and captured in their indiscriminate overuse of natural resources.⁷²

To that end we are enabled to see Bertilak and Theseus as figures guilty of this variety of aristocratic overreach, first in their exploitative relationships with nature but more directly in their over-imposition of their own authority over the landscapes and people within their domains. As beginning readers, however, we tend to focus less on these figures as aristocrats expressing their social standing, and more on the subordinate characters upon whom their authority is exercised. While Gawain lives within circumstances where he is led to "see his love of his life, as the Green Knight magnanimously calls it, as a terrible failure,"⁷³ Palamon and Arcite, and especially Emelye, likewise find themselves within a space of brutal subjectivity, forced into a zero-sum spectacle to determine the outcome of their romantic entanglement: "[t]o Theseus's mind," writes Rudd, "the rivals surroundings, like their battle, needs to be rightly controlled if the two heroes are to regain their standing as worthy suitors of the fair, if oblivious, Emelye."⁷⁴

Further, identifying in this spectacle the "civilizing forces of culture and humanity, which seek to put distance between human and-non-human," Rudd notes how the escalation of romantic rivalry to aristocratic extravaganza (and the destruction of nature required for this elevation ultimately "privileges the human realm" by "shifting the basis of the rivalry from a direct one-to-one fight to a full-scale courtly spectacle"⁷⁵ in ways that leave green readers "feeling distinctly uncomfortable with the way the plot is developing."⁷⁶

72 Johnson, *Waste and the Wasters* (see note 2), 43.

73 Johnson, *Waste and the Wasters* (see note 2), 146.

74 Rudd, *Greenery* (see note 45), 55.

75 Rudd, *Greenery*, "Trees" (see note 45), 55.

76 Rudd, *Greenery*, "Trees" (see note 45), 56. For a closely aligned ecocritical reading that likewise explores the character of Chaucer's habit of connecting the destruction of nature with the expression of social privilege see Sarah Stanbury, "Ecochaucer: Green Ethics and Medieval Nature," *The Chaucer Review* 39.1 (2004), 1–16. She concludes, here 13, that Chaucer "maintains a disenchanting skepticism about nature's benevolence as well as a canny or even postmodern understanding about how social institutions call on 'the natural' to justify their own privileges," and also that "Chaucer invites the smart reader to be alert to nature's impulses and collusion with social hierarchies."

Just as Fitt III serves to alert green-minded readers to the habits of aristocratic waste and excess in *Sir Gawain*, so do Theseus's ravages of his groves, coupled with the Knight's continuing authorial intrusions enable us to consider Bertilak and Theseus as socially privileged if not fully fair-minded aristocrats, but more as tyrants, autocrats, and wasters. These portrayals presage more nuanced future depictions of wasters – Milton's Satan first comes to mind – as a figure equally prone to assert his privilege by exerting an unjustified control over God's Edenic domains, readily identifiable as a landscape despoiler and therefore a supreme "waster." As these examples confirm, the matter of waste offers a useful context for understanding character types who are also prone to assert their social authority in ways toxic to landscape and humans alike – to nature and to society – and then reorienting those habits in ways that benefit both larger communities and future generations.

Fabian Alfie

“A New Flood Was Released from the Heavens”: The Literary Responses to the Disaster of 1333

Abstract: In early November 1333, heavy rains caused the Arno to flood. The destruction was widespread, killing over 300 people in Florence alone. The catastrophe was one of several in the first half of the fourteenth century and may be attributed to the changing climate. In the aftermath of the flood, a cultural conversation took place regarding the cause of the disaster; natural philosophers noted the planetary conjunctions that caused the torrents, while theologians saw the hand of God in the calamity. Additionally, numerous writers described the events, particularly the historian Giovanni Villani, and the poets Antonio Pucci, Adriano de’ Rossi, and Marino Ceccoli.

Keywords: Flood of 1333, deluge, Arno, Florence, Italian poets, chroniclers

Introduction

It is important to understand the ecological backdrop to the historical developments of fourteenth-century Italy. Probably the most famous event, the Black Plague that broke out in 1347, had a mortality rate of over 50%,¹ and it recurred only a decade later, as well as periodically thereafter.² Its impact on the culture of the age cannot be overstated. In literary terms, the Black Plague of 1347 directly influenced Giovanni Boccaccio’s *Decameron* (ca. 1348–ca. 1351), with its impressive description of the disaster. Yet the recurrence of the bubonic plague in 1374 forms the basis for another collection of stories, the *Novelle* by the Lucchese author Giovanni Sercambi (1348–1424). Millard Meiss, above all, argued that the pan-

1 Sharon N. Dewitte, “The Anthropology of Plague: Insights from Bioarcheological Analyses of Epidemic Cemeteries,” *Pandemic Disease in the Medieval World*, ed. Monica H. Green (Kalamazoo, MI, and Bradford: Arc Medieval Press, 2015): 97–123; here 101.

2 Ann G. Carmichael, “Plague Persistence in Western Europe: A Hypothesis,” *Pandemic Disease in the Medieval World*, ed. Monica H. Green (see note 1), 157–91; here 176. For more about the recurrence of *Yersinia pestis*, see Guido Alfani and Tommy E. Murphy, “Plague and Lethal Epidemics in the Pre-Industrial World,” *The Journal of Economic History* 77.1 (March 2017): 314–43.

demic changed artists' visual depictions of Christ.³ Meiss's specific thesis has been challenged in recent decades, but it cannot be denied that the Black Plague had an impact on the evolution of the visual arts. The Black Plague, with its frighteningly high mortality, did not occur *ex nihilo*, but it was probably a symptom of a broader climatological change in the northern hemisphere.⁴ It has been established that the end of the previous century saw the shift from a warmer period, the Medieval Climate Anomaly (MCA) or Medieval Optimum, during which temperatures were warmer on average by one-degree Celsius.⁵ The transition to a colder climate led to wetter conditions throughout Europe, resulting in the Great Famine of 1315–1322 in Northern Europe.⁶ Italy too saw increased variability in climate, and the Winter of 1322–1323 was remembered as the coldest in living memory⁷; the 1320s ended with a famine comparable to the Great Famine in Northern Europe, and the 1330s were marked by great downpours in Florence.⁸ It is likely that the environmental crisis of the early decades of the fourteenth century left the population in a weakened condition, and thus more susceptible to the ravages of the Black Death.⁹ Thus, the greatest historical factor of fourteenth-century Italy can probably be tied directly to changes in the global climate. It is important to note, however, that it was not the only catastrophic result of medieval climate change in the fourteenth century.

3 Millard Meiss, *Painting in Florence and Siena after the Black Death: The Arts, Religion, and Society in the Mid-Fourteenth Century* (Princeton, NJ: Princeton University Press, 1951). For a more recent study, see Jean E. Jost, "The Effects of the Black Death: The Plague in Fourteenth-Century Religion, Literature, and Art," *Death in the Middle Ages and Early Modern Time: The Material and Spiritual Conditions of Death*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 16 (Berlin and Boston: Walter de Gruyter, 2016), 193–238.

4 Emmanuel Le Roy Ladurie, *Times of Feast, Times of Famine: A History of Climate Since the Year 1000*, trans., Barbara Bray (1967; New York: Farrar, Straus and Giroux, 1971), 8.

5 Bruce M.S. Campbell, *The Great Transition: Climate, Disease and Society in the Late Medieval World* (Cambridge: Cambridge University Press, 2016), 2–3. See also John Aberth, *An Environmental History of the Middle Ages: The Crucible of Nature* (London and New York: Routledge, 2013), 26.

6 John Aberth, *An Environmental History of the Middle Ages* (see note 5), 49–51.

7 Paolo Nanni, "Facing the Crisis in Medieval Florence: Climate Variability, *Carestie*, and Forms of Adaptation in the First Half of the Fourteenth Century," *The Crisis of the Fourteenth Century: Teleconnections Between Environmental and Social Change?* ed. Martin Bauch and Gerrit Jasper Schenk. Das Mittelalter: Perspektiven mediävistischer Forschung, Beihefte 13 (Berlin and Boston: Walter de Gruyter, 2020), 169–89; here 176–81.

8 John Aberth, *An Environmental History of the Middle Ages* (see note 5), 181–82.

9 Paolo Nanni, "Facing the Crisis in Medieval Florence" (see note 7), 170. See also Ann G. Carmichael, "Plague Persistence in Western Europe: A Hypothesis," *Pandemic Disease in the Medieval World*, ed. Monica H. Green (see note 2), 157–91; here 179.

The topic of this essay is one such catastrophe, the deluge of Florence in 1333. As Francesco Salvestrini writes regarding that flood, a natural catastrophe is not merely a physical event, but also a cultural and mental construct of the people who survive it.¹⁰ While not rivaling the scope of the Black Plague, the flood left an indelible impact on Florentine culture, affecting the burgeoning tradition of visual art in the city, particularly Giotto's production.¹¹ It also influenced the literature of fourteenth-century Florence, appearing in the writings of several writers. In addition to passages in chronicles like Domenico Lenzi's *Specchio umano* and the *Memoriale* by Alessio and Francesco di Borghino Baldovetti, a lengthy discussion of it and its aftermath appear in Giovanni Villani's history of Florence *Cronica*, and the Augustinian monk Simone Fidati da Cascia (ca. 1290–1348) cites it in a letter of admonishment to the Florentines.¹² The flood is also the subject of two long poems by Antonio Pucci (ca. 1310–1388), as well as three sonnets by Adriano de' Rossi, and one sonnet by the poet from Perugia, Marino Ceccoli. Furthermore, Villani reports that King Robert II of Naples wrote an epistle to Florence, and a vernacular translation of the letter constitutes one of the four chapters in Villani's *Cronica*. In addition to being a natural disaster of historical importance, therefore, it is also important for the study of fourteenth-century Italian literature.

The Florentine Chroniclers: Domenico Lenzi, the Baldovinetti Brothers, and Giovanni Villani

The disaster that befell Florence was recorded in several historical sources which can be culled together into a consistent account.¹³ Beginning on Monday, November 1, 1333, it rained continuously for several days, such that the Arno burst its banks to the east of the city on Thursday November 4, 1333. By Thursday evening,

10 Francesco Salvestrini, “L’Arno e l’alluvione Fiorentina del 1333,” *Le calamità ambientali nel tardo medioevo europeo: Realtà, percezioni, reazioni. Atti del XII convegno del Centro di Studi sulla Civiltà del tardo Medioevo*, S. Miniato, 31 maggio – 2 giugno 2008, ed. Michael Matheus, Gabriella Piccinni, Giuliano Pinto, and Gian Maria Varanini (Florence: Firenze University Press, 2010), 231–56; here 231.

11 Erlink S. Skaug, *Giotto and the Flood of Florence in 1333: A Study in Catastrophism, Guild Organization, and Art Technology* (Florence: Giunti, 2013).

12 Gerrit Jasper Schenk, “Prima ci fu la cagione de la mala provedenza de’ Fiorentini . . .’ Disaster and ‘Life World’ – Reactions in the Commune of Florence to the Flood of November 1333,” *The Medieval History Journal* 10. 1–2 (2007): 355–86; here 360.

13 Gerrit Jasper Schenk, “Prima ci fu la cagione de la mala provedenza de’ Fiorentini . . .” (see note 12), 359–60. The following overview of the flood is culled from Schenk’s article, 362–67.

the *antiporta* of Croce to the east of the city crumbled, lightning struck a tower near San Frediano, and 300 meters of the city wall were swept away. Then, three of the four bridges over the Arno collapsed, leaving only the damaged Rubaconte bridge. The Castello d'Altafronte fell, along with its salt storehouse, as did the houses along the Arno. The *Specchio umano*, a book written by Domenico Lenzi (d. 1348) that focuses on the costs of grain in the market of Orsanmichele between 1320 and 1335, offers a succinct description of the calamity:

Il giovedì seguente, a dì IIII di novembre detto, fue il crudelissimo diluvio che allaghò tutta la città e 'l piano di Firenze conn uccisione di molti cristiani e bestiamе, e con chadimento grande senza numero di palagi e di torri e chase, e guastamento di terre e luoghora e poderi infinitamente sanz'alchun rimedio. Il quale diluvio allo principio rovinò il ponte alla Carraia e quel di Santa Trinita e 'l ponte Vecchio, e altre grandissime dignità del comune di Firenze fiorita, tante che sarebbe innumerabile a nomarle, e poche persone il crederebbono s'ellino noll'avessono vedute. Onde per questa scellarata crudeltade istette che non si vendè in piazza d'Orto Sammichele dal detto dì infino a dì xiiij del detto mese, sventurato per la maggior parte della gente fiorentinescha.¹⁴

[The following Thursday, on the fourth day of said November, there was the most cruel deluge that flooded the entire city and plain of Florence, with the deaths of many people and animals, and with the collapse of a great many of palaces and towers and houses – beyond numbering – and with the destruction of innumerable lands and spaces and farms that received no help. At the outset the deluge ruined Carraia bridge, as well as the bridge of Santa Trinità and Ponte Vecchio, and other great monuments of the flourishing commune of Florence, so many that it would be impossible to name them all, and few people would believe it unless they saw it with their own eyes. Thus, because of that cruel tragedy, it happened that there were no sales in Orsanmichele from that day until the thirteenth day of said month, a misfortune for the greater part of the Florentine people.]

The paragraph about the flood in the *Memoriale* of the brothers Francesco and Alessio di Borghino Baldovinetti, further, presents a broader overview of the event:

Memoria che dì IIII di nove[m]bre 1333, in giovedì, si vene grande piena per Arno; e crescendo, sì ne menò la peschaia degl'Angetti, e poi apreso ne menò la peschaia delle Mulina d'Ongnesanti, e poi apresso chadde il ponte alla Charaia e poi chade il ponte a Sancta Trinita e poi chade il ponte Vecchio e chadono tutte le chase ch'erano in su l'Arno dal ponte Vecchio insino a quello a Sancta Trinita e dal ponte Vecchio insino alla via che va da casa Pulci lu[n]g'Arno; e corse Arno per borgho benchè fosse pocho e pocho durò. E questo fu il detto giovedì, dì IIII di novembre; e andarne le mulina d'Arno ch'erano nella città tra 'l ponte Rubaconte e 'l Vec-

¹⁴ Domenico Lenzi's *Specchio umano* is cited from Giuliano Pinto, ed., *Il libro del biadaio: Carestie e Annona a Firenze dalla metà del '200 al 1348* (Florence: Olschki, 1978), 491. The translation is mine.

chio: e non ve ne rimase se none huno. E stette tutto 'l dì grosso, e poi la notte si fece grande guardia nella città di Firenze. E cominciò la notte Arno a scemare, e scemò insino preso a meza notte: dichò, della notte del giuovedì andando, e del venerdì vegnendo. E pasata di pocho meza notte, vene grande piena e rupe le mura della città, tra la porta Sancto Francesco e 'l corso di Tintori. E gittò in tera la porta di Sancto Francesco e quella dalla Croce al Gorgo, ed entrò per la città forte mente, sicchè tutta la città alaghò. E poi riuscì al Prato d'Ongnesanti e ivi rupe le mura, sich'ebe dove sfogare. E corse borgho Sancto Apostolo sì forte, che menava le botti piene di vino e forzieri e altre maserizie asai, bene che fose maggiore per la città rosa e per porta del Duomo; ed alaghò Sancta Croce dentro e rupe loro bene MMD braccia di mura di loro orti e campi. Bastò questo diluvio insino preso ch'a ddi; e poi cominciò a chalare. Gienti asai afogaro; ed anche n'andaro per Arno di quelli che camparo in su' legni. E io Aleso ne vidi poi delli scanpati; e grande paura ebe ongni persona, e molte chase chadono per la città e per lo conto di questo diluvio. E ricievettesi grandissimo danno e in città e in contado; e molto bene si guastò per quello diluvio.¹⁵

[Memoir of the fourth of November 1333, on Thursday, when there came a great flood of the Arno; as it grew it swept away the fishing pier¹⁶ of the Angetti, and then after, it swept away the fishing pier of the Ognisanti Mills; then afterward, the Carraia bridge collapsed, then the Santa Trinità bridge collapsed, then Ponte Vecchio collapsed. Then all the houses along the Arno collapsed, from Ponte Vecchio up to Santa Trinità bridge, and from Ponte Vecchio down to the road that goes from the Pulci house along the Arno. And the Arno ran through the neighborhood, although it wasn't deep and it didn't last for long. And this was on the aforementioned Thursday, on the fourth day of November. And the city's mills were washed away on the Arno from Rubaconte bridge and Ponte Vecchio, and there remained only one of them. The water stayed high all day, and that night many people kept watch in the city of Florence. It began to recede, and it receded until close to midnight: I mean, of the night of Thursday going into Friday. But beyond midnight, the water rose and broke the walls of the city, between San Francesco gate and the street of the dyers (*Corso dei Tintori*, a street in Florence); and it cast down the gate of San Francesco as well as that of Croce al Goro, and it entered the city with force so that the entire city was flooded. And then it arrived at Prato of Ognisanti and there it broke the walls where it could be discharged. And it ran through the neighborhood of Sant'Apostolo with such force that it carried away barrels filled with wine, chests, and many other goods, even though it was stronger within the red city (i.e., Florence) and through the gate of the Duomo. And it flooded inside Santa Croce church and destroyed 2,500 *braccia*¹⁷ of walls around their gardens and fields. This flood remained until the break of day, and then it began to subside. Many people drowned, and the Arno swept away many people who survived by clinging to wood. And I, Alessio, saw many survivors; everyone felt great fear, and many houses collapsed throughout the city on account of this

15 All citations of the memoir by Francesco and Alessio Baldovinetti are from Gino Corti, “Le ricordanze trecentesche di Francesco e di Alessio Baldovinetti,” *Archivio storico italiano* 112.1 (1954): 109–24. The translation is mine.

16 Fishing pier: a weir (*peschiera*) was an embankment which trapped fish so that they could be caught more easily.

17 *Braccio* (plural, *braccia*) was a unit of measurement of approximately 0.58 meters.

flood. Great harm was brought to the city and its countryside, and many goods were destroyed by the flood.]

These two passages do not do justice to the scale of the terrible event. However, the historian Giovanni Villani (1275–1348) discusses the flood extensively, providing a wealth of details about the devastation and as such he gives the necessary background for the interpretation of the other works. His massive history of Florence begins in the biblical era, with the destruction of the tower of Babel (book 1, chapter 2), which led to the dispersion of different peoples, including those who initially settled in Tuscany. Villani's history moves from ancient history through the city's reconstruction after the sack by the Ostrogothic King Totila to the internecine conflict of recent decades; the twelfth book is the penultimate. That he dedicates four chapters to the deluge of 1333 suggests that he considered it worthy of a prominent place in Florentine history. The first chapter of book 12 relates the events of the disaster as they unfolded.¹⁸ He begins with the torrential rains:

e così seguì al continuo IIII dì e IIII notti, crescendo la piova isformatamente e oltre a modo usato, che pareano aperte le cataratte del cielo, e con la detta pioggia continuando grandi e spessi e spaventevoli tuoni e baleni, e cagendo folgori assai (775)

[So it followed continuously for four days and four nights, with the rain increasing unusually and beyond the regular way, that the waterfalls of heaven seemed opened, and along with said rain there followed frequent and fearful thunder and lightning, with many lightning bolts falling from the sky.]

As Trevor Dean observes, the reporting of weather phenomena in the Middle Ages is often pervaded by symbolism and portentousness,¹⁹ and that is certainly true of Villani's depiction of the storms. In addition to the reference to the ominous thunderclaps, Villani evokes the biblical story of Noah with the reference to the "waterfalls of heaven," even using the analogous expression *cataratte del cielo* (Genesis 6:11: "rupti sunt omnes fontes abyssi magnae, et *cataractae caeli* aperti sunt," emphasis added). In so doing, Villani anticipates the common explanation of the flood as God's punishment for sinful living. In Villani's narrative, the ill omens came to fruition, as people awoke to the destruction of the city walls in front of the dormitory of the Minorites (776). Devastation quickly came to the city. High water arrived at the altars of the duomo and the Badia, respectively,

¹⁸ Cited from Giovanni Villani, *Cronica*, introduced by Giuseppe Edoardo Sansone and with commentary by Giulio Cura Curà (Rome: Istituto poligrafico e Zecca dello Stato, 2002). All translations are mine.

¹⁹ Trevor Dean, "Natural Encounters: Climate, Weather, and the Italian Renaissance," *European Review of History / Revue Européenne d'Histoire* 18.4 (2011): 545–61; here 550.

and it reached the chorus in the church of Santa Riparata; it passed the first step of the Palazzo del Popolo and was up to two meters deep in Orsanmichele and Mercato Nuovo (776). The Arno then ruined the fishing pier of Ognisanti and, in rapid succession, the bridges of Carraia, Santa Trinità, and Ponte Vecchio all collapsed (776).

With the destruction of Ponte Vecchio, an ancient statue of the Mars, which had been there since the city's founding, was washed away (777). Villani notes that the Florentines held many beliefs about the statue of Mars, the first patron of the city, because the god personified the daring of the Florentines.²⁰ For Villani, the negative impact of the flood was directly associated with the statue of Mars,²¹ so further destruction befell the city. Castello Altafronte crumbled, along with its mill and salt storehouse, and the water swept away the houses around Ponte Vecchio (777). The flood continued into the next day, and force of the water destroyed other parts of Florence, including the wall near Ognisanti (777).

When the Arno finally receded, the Florentines took complete stock of the damage. It killed more than 300 people, along with a great number of livestock, and it brought down bridges, mills, and piers; Villani mentions that it cost one hundred and fifty thousand gold florins to restore the city (777–78). Nearby cities also suffered from flooding, Villani writes, and they included Perugia, Todi, Orvieto, Rome, Siena, Arezzo, Pistoia, Prato, Colle, and Poggibonsi (778). However, their damage was not as extensive as that of Florence, and he compares the destruction in 1333 to that which occurred over a century earlier during the flood of 1219:

I più dissono che l'antico non fa quasi molto meno acqua, ma per l'alzamento fatto del letto d'Arno, per la mala provedenza del Comune di lasciare alzare le pescaie a coloro ch'aveano le molina inn-Arno, ch'era montato più di braccia VII da l'antico corso, la città fu più alligata e con maggiore damaggio che per l'antico diluvio . . . (778)

[The majority said that the older flood did not have much less water, but through the raising of the Arno's riverbed, through the lack of prudence of the Commune allowed the building of fishing piers and mills on the Arno that caused it to be raised up by seven *braccia* from its older bed, the city was more flooded with greater damage than the older flood.]

Villani places some of the blame for the destruction on the bad governance of the city, although he does not fully rule out divine judgment for the flooding, again

²⁰ Francesco Salvestrini, “L'Arno e l'alluvione Fiorentina” (see note 10), 238.

²¹ Gerrit Jasper Schenk, “More Resilient with Mars or Mary? Constructing a Myth and Reclaiming Public Space, The Destruction of the Old Bridge of Florence,” *Strategies, Dispositions, and Resources of Social Resilience: A Dialogue Between Medieval Studies and Sociology*, ed. Martin Andreß, Lukas Clemens, Benjamin Rampp (Wiesbaden: Springer VS, 2020), 139–62; here 146.

using language that evokes Noah's flood, "certainly, clear waters surged from the abyss" ("Di certo che l'acqua chiara surgea d'abisso . . .," 778); Genesis, too, described the waters surging from the abyss. The biblical reminiscence toward the end of the first chapter functions as a transition to the second chapter, which details the debate that ensued about the causes of the flood: to wit, was the flood brought about by astrological causes, or was it the result of God's judgment of the Florentines?²² What follows in chapter two is, at first, a lengthy discussion of the positions of the constellations and planets, all of which conjoined at the start of November 1333 to bring about the torrential rains.²³ Astrological reasoning was the basis for a natural explanation to the disaster,²⁴ as celestial bodies were believed to exert influence over the earth through the qualities they shared with the various elements.²⁵ It appears that the community at large considered the astrologers' reasoning to be sound because no one challenged it outright. At the same time, astrological determinism might have been seen as problematic and ran the risk of being heretical by challenging the concept of human free will.²⁶ While accepting the astrologers' natural explanation, however, the theologians proposed a supernatural reason for the flood:

Sovra la detta questione i savi religiosi e maestri in teologia rispuosono santamente e ragionevolmente, dicendo che lle ragioni dette delli astrolaghi poteano essere vere, ma non di necessità, se non in quanto piacesse a Dio; però che Idio è sopra ogni corso celesto, e elli il fa muovere e regge e governa; e 'l corso di natura è apo Dio, quasi come al fabro è il martello, che con esso può foggare diverse spezie di cose, come aveva imaginato nella sua mente. (780)

22 Laurence Moulinier and Odile Redon, "L'Inondation de 1333 à Florence. Récit e Hypothèses de Giovanni Villani," *Mediévales* 36 (1999): 91–104; here 91.

23 Francesco Salvestrini, "L'Arno e l'alluvione Fiorentina . . ." (see note 10), 243.

24 William R. Newman and Anthony Grafton, "Introduction: The Problematic Status of Astrology and Alchemy in Premodern Europe," *Secrets of Nature: Astrology and Alchemy in Early Modern Europe*, ed. in William R. Newman and Anthony Grafton (Cambridge, MA, and London: MIT Press, 2001), 1–37; here 13–14. See also Richard Lemay, "The True Place of Astrology in Medieval Science and Philosophy: Towards a Definition," *Astrology Science and Society: Historical Essays*, ed. Patrick Curry (Wolfeboro, NH: The Boydell Press, 1987), 57–73; here 58.

25 J. D. North, "Medieval Concepts of Celestial Influence: A Survey," *Astrology Science and Society: Historical Essays*, ed. Patrick Curry (see note 25), 5–17; here 10. See also Steven Vanden Broecke, *The Limits of Influence: Pico, Louvain, and the Crisis of Renaissance Astrology* (Leiden and Boston: Brill, 2003), 8.

26 Paola Zambelli, *The Speculum Astronomiae and Its Enigma: Astrology, Theology and Science in Albertus Magnus and His Contemporaries* (Dordrecht, Boston, London: Kluwer Academic Publishers, 1992), 11. See also Graziella Federici Vescovini, "Peter of Abano and Astrology," *Astrology Science and Society: Historical Essays*, ed. Patrick Curry (see note 25), 19–39; here 23.

[About this question, the religious wisemen and masters of theology replied with faith and reason, saying that the explanations of the astrologers could be true, but not of necessity, without it also pleasing God; because God is above all celestial movements, and he makes them move, and he governs them; and the course of nature belongs to God, just as the hammer belongs to the blacksmith, for with it he can forge as many different types of things as he imagines in his mind.]

The theologians concluded that God employed natural causes – the planets and the constellations – for His moral ends, the castigation of the sins of Florence. The mediated perspective such as the one promoted by the theologians was not uncommon, as natural causes for disasters were often coupled to supernatural explanations.²⁷ As we shall see, several of the poets who discussed the flood of 1333 would similarly combine astrological causes to divine explanations. Yet what results from Villani’s narrative is a subtle understanding of the calamity brought about by the triple causes of human agency (the Commune’s lack of foresight), natural causes (the stars), and divine anger. The reconciliation of diverse perspectives about the flood contradicts the common stereotype of the Middle Ages as an age of obscurantism, during which superstition dominated the thinking of religious zealots.²⁸ Instead, they saw natural causes and human negligence contributing to their misfortunes.

Indeed, the following chapter contributes even greater complexity to the picture. The debate did not remain localized in the city of Florence because the Cardinal Legate of Bologna, Bertrand de Poujet (ca. 1280–1352) and King Robert II of Naples (1278–1343) chimed in.²⁹ The entirety of chapter three is devoted to King Robert’s letter to Florence translated into the vernacular. Like the theologians and other thinkers, he concurs that God employed the flood to punish the Florentines (785). King Robert alludes to the biblical story of Noah’s flood, referring again to the waterfalls of heaven (“le cataratte del cielo”). As Laurence Moulinier and Odile Redon point out, the Universal Deluge is a constant point of reference when dealing with the flood of 1333.³⁰ However, King Robert adds that the worldly punishment of the Florentines was in fact an example of God’s goodness (785). Using numerous biblical citations, King Robert argues that God sends hardships

27 Christopher M. Gerrard and David N. Petley, “A Risk Society? Environmental Hazards, Risk and Resilience in the later Middle Ages in Europe,” *Natural Hazards* 69 (2013): 1051–79. See also John Aberth, *An Environmental History of the Middle Ages* (see note 5), 1–2.

28 Amy S. Kaufman and Paul B. Sturtevant, *The Devil’s Historians: How Modern Extremists Abuse the Medieval Past* (Toronto, Buffalo, and London: University of Toronto Press, 2020), 6.

29 Gerrit Jasper Schenk. “Prima ci fu la cagione de la mala provvidenza de’ fiorentini . . .” (see note 12), 367.

30 Laurence Moulinier and Odile Redon, “L’Inondation de 1333 à Florence” (see note 23), 92.

out of love. He punishes His wayward followers in this life so that He will not need to condemn them in the next life (786). King Robert argues that the suffering the Florentines have undergone is minimal to the pains of hell, and thus, the flood is evidence of God's mercy.³¹ The King closes his letter expressing his consolation and promising his assistance to Florence in its time of need (790). His letter is an attempt to raise the spirits of the afflicted Florentines.

Villani never explicitly spells out the Florentines' sins, but he possibly refers to their degeneracy in the fourth chapter of book 12, which deals briefly with the aftermath of the flood. In it, he depicts how some of the powerful families of Florence, in particular the Rossi and the Frescobaldi, attempted to capitalize on the chaos, opportunistically causing disorder:

. . . certi grandi di Firenze cercaro di fare novità contro a' popolani, avisandosi di poterlo fare, però che sopra l'Arno non avea che uno ponte, e quello era in forza di grandi, e la città scompigliata e tutta schiusa, e le genti tutte isbigottite. Onde uno di casa i Rossi fedì uno de' Magli loro vicino, per la qual cosa tutto il popolo fue sotto l'arme, e più di si fece grande guardia in Firenze di dì e di notte; e alla fine i grandi e possenti e ricchi, che aveano a perdere, non aconsentiro alla follia de' malvagi, e ancora il popolo aveano preso vigore e forza; onde non s'ardiò di cominciare novità; e ancora se l'avessono cominciata n'avrebbero avuto il peggiore. E peranto si riposò la città, e quello de' Rossi che fece il malificio fue condannato. (791)

[. . . certain magnates of Florence tried to bring about a change against the *popolani*, warning them that they could do it, because above the Arno there was only one bridge and it was in control of the powerful, while the city was upset and undone, and all its people were in fear. Therefore, someone of the Rossi household wounded one of the Magli, his neighbor, for which the entire population was in arms, and for many days Florence was under guard both day and night. And in the end the great and powerful and wealthy, who had the most to lose, didn't acquiesce to the folly of the wicked, and the *popolo* had gained in strength and force, hence they didn't dare to begin any further changes; and if they had, they would have had the worst of it. And so, the city relaxed and the member of the Rossi who did the evil deed was condemned.]

Throughout his historical account, Villani expounds upon the internecine warfare of recent decades in detail, and the misdeeds of the powerful form the backdrop for the disaster in November 1333. In chapter four, Villani explains, the Rossi wanted to exploit the aftermath of the flood to overthrow the government of the *popolani*,³² but their plans were stymied. Taken together, the four chapters in

31 Gerrit Jasper Schenk, "Prima ci fu la cagione de la mala provvidenza de' fiorentini . . ." (see note 12), 370.

32 Gerrit Jasper Schenk, "Prima ci fu la cagione de la mala provvidenza de' fiorentini . . ." (see note 12), 372.

book 12 illustrate how Villani considered the flood of 1333 to be of great historical significance. In his eyes, it was probably the most important ecological catastrophe to befall the city until the arrival of the Black Plague in 1348 that would take his life.

Antonio Pucci

The Florentine writer, Antonio Pucci, contributes further to our views on the disaster (note: the two poems about the flood, and their translations, appear in the appendix). The son of a bell maker, Antonio Pucci became a town crier in 1349.³³ He left an extensive literary production, including several *cantari* in *ottava rima* inspired by courtly romances,³⁴ numerous sonnets and *serventesi*, and a poem in *terza rima* about Florence's Old Market. Around 1373, Antonio Pucci composed *Il Centiloquio*, a poem consisting of 91 cantos in *terza rima* that set Villani's *Cronica* in verse.³⁵

One canto of the *Centiloquio* describes the flood of 1333, following strictly the four chapters of the twelfth book of Villani's history. He begins with the torrential rains and ominous thunderclaps that started on Monday 1, November 1333 (vv. 10–18) before moving to flooding of the outlying settlements (vv. 19–30). Then on Wednesday night, the Arno begins to destroy Florence proper, beginning with the walls outside the convent of the Friars Minor, the rising water within the churches, and the destruction of Castello Altafronte and the three bridges (vv. 31–60). The water carries away the statue of Mars and many houses along the riverfront (vv. 61–102). He estimates the damage to the city cost over 200,000 gold florins (vv. 109–11), arriving at a sum higher than Villani's. Finally, Pucci notes that other cities along the Arno were also harmed by the deluge (vv. 151–83). In other words, the narration of the disaster in the *Centiloquio* reiterates that found in Villani's *Cronica*.

Pucci moves to Villani's second chapter, still hewing closely to his source while elaborating on it somewhat. Pucci mentions the debate about its causes, whether it was due to astral influences or God's punishment (vv. 184–91). While

33 Natalino Sapegno, ed., “Antonio Pucci,” *Poeti minori del trecento* (Milan and Naples: Ricciardi, 1952), 349–420; here 349–50.

34 Ferruccio Ferri, ed., *La poesia popolare in Antonio Pucci* (Bologna: Beltrami, 1909).

35 Roberta Cella, “Il *Centiloquio* di Antonio Pucci e la *Nuova Cronica* di Giovanni Villani,” *Firenze alla vigilia del rinascimento: Antonio Pucci e i suoi contemporanei. Atti del convegno di Montreal 22–23 ottobre 2004* McGill University, ed. Maria Bandinelli Predelli (Florence: Cadmo, 2006), 85–110; here 85.

Villani speaks in generalities about the Florentines' sins, Pucci states outright that Florence's political situation has warranted its punishment from God. He enumerates the internecine struggles that have afflicted the city, beginning with the wars between the Guelphs and Ghibellines and the factional strife between the White and Black Guelphs in the previous century (vv. 209–34). He then adds the city's rebellions against the Holy Roman Emperor decades earlier (vv. 238–43) before concluding that all this violence inspired God's wrath (vv. 247–52). In this portion of the canto, Pucci adds his perspective on the cruel living of the Florentines, including political events absent from Villani's source material.

Pucci then summarizes the letter from King Robert, found in Villani's third chapter, reducing it to three succinct portions:

E tre parti contenne, com'io pratico:
 l'una, che noi comportassimo in pace
 l'avvenimento dell'Arno salvatico;
 e la seconda, che molto mi piace,
 che de' peccati noi ci correggessimo
 ed ammendassimo il tempo fallace;
 la terza fu, che noi di lui prendessimo
 verace securtà, ch'alla bisogna
 non mancherebbe in ciò che noi chiedessimo (vv. 262–70)

[It contained three parts, as I relate here:
 in one: that we should endure with peace
 the events of the savage Arno;
 in the second, which I like greatly,
 that we should correct our sins
 and make amends for our past failings;
 the third was that we should take comfort
 from him, because he would not fail us
 in whatever we might ask of him.]

Pucci simplifies the letter's spiritual message, reducing it from King Robert's subtle mixture of God's judgment and mercy; here the flood is merely God's punishment for sin. However, Pucci retains Robert's promise of support to the city as it rebuilds. Pucci then adds the event from Villani's fourth book, narrating how some of the powerful families try to take advantage of the disorder in the city for their own political gain. He describes how a member of the Rossi family wounded one of the Magli, but the other aristocratic families decided not to follow suit:

Dopo il diluvio certi grandi dissero
 'ronpasi il popolo e 'l ponte si tagli
 acciò che que' di là non ci assalissero';

e un de' Rossi fedì un de' Magli,
 qual era popolan se ben considero,
 e 'l popol s'armò tutto a que' travagli.
 E quando gli altri grandi questo videro,
 non seguitaro il mal cominciato
 e 'ntorno al fatto con senno provvidero;
 onde quel che fedì fu condannato
 come si convenìa secondo l'ordine,
 e 'l popol si rimase nel suo stato (vv. 274–85).

[After the deluge, certain magnates said:
 "We can defeat the *Popolo* and cut the bridge
 so that they – from over there – can't attack us!"

Then a Rossi wounded one of the Magli
 who, if I understand correctly, was one of the *popolani*:
 anticipating troubles, the people all armed themselves.

But then the magnates saw this,
 they didn't follow through on their evil plans
 and instead, they wisely remedied the situation.

So the one who did the wounding was condemned,
 as was needed to maintain order,
 and the *popolani* remained in power.]

Pucci makes explicit the political machinations of the Rossi, situating their violent actions in the context of their antipathy toward the government of the *popolani*. Throughout the trecento the *popolani* dominated the city government, at times creating territorial "kingdoms" within the city.³⁶ Therefore, while the canto represents the versification of Villani's *Cronica*, it is not a mere duplicate. Rather, Pucci ties the flood more tightly to the political infighting of the 1330s, and it simplifies the nuanced explanations of its cause. Nonetheless, Pucci's *Centiloquio* does not add significantly to the information about the deluge.

That said, the *Centiloquio* is not Pucci's only poem about the disaster. Decades prior, Pucci composed a *serventese* that communicates another perspective on the deluge. It consists of 449 verses, in quatrains made up of three hendecasyllables and one *quaternario* in the rhyme scheme AAAb. The *serventese* opens with Pucci moralizing about the flood's cause, explaining it as Christ's punishment for the

36 Gene A. Brucker, "Corporate Values and the Aristocratic Ethos in Trecento Florence," *The Civic World of Early Renaissance Florence* (Princeton, NJ: Princeton University Press, 1977), 14–59; here 39–40. See also David Rosenthal, "The Spaces of Plebeian Ritual and the Boundaries of Transgression," *Renaissance Florence: A Social History*, ed. Roger J. Crum and John T. Paoletti (Cambridge: Cambridge University Press, 2006), 161–81; here 162.

Florentines' sins (vv. 17–20).³⁷ Thus, long before the composition of the *Centiloquio*, Pucci adhered to the notion that the flood occurred as God's retribution for the city's iniquities. He even notes that the preachers warned the Florentines but to no avail (vv. 34–36). Deeper into the poem he will elaborate further on his understanding of the Florentines failings, but, for now, he starts the narration with the ominous portents of the storm; the clouds hid the stars and moon, leaving the city in complete darkness (vv. 45–47). Pucci then turns his attention to the flow of the swollen Arno, from its source in Casentino (v. 53), to where it joined with the Sieve (v. 63). He then relates the devastation along its banks. In Remolo, the Arno destroyed mills and fulling mills (vv. 77–78), and its water shot out of Compiobbi like an arrow (vv. 79–80); in Rovezzano it killed 34 people (vv. 85–87). The people of San Salvi cried out for God's mercy (vv. 88–92). When it reached Florence proper, the flood began its devastation. It knocked down the walls of the monastery of Santa Croce, and the friars too begged God to spare them (vv. 101–120). The poet then turns back to the topic of the rushing water:

Lassamo star costor col buon costume
e ritorniamo al periglioso fiume,
sì come ruppe col suo gran volume
la forte porta,
quella alla Croce, ove la gente morta
tutta si tene, veggendo la scorta,
e 'ncontanente mandâr giù accorta
la caterratta (vv. 121–128).

[Let's leave them, courteously,
and return to the dangerous river,
how with its great volume it broke
the strong door –
the one by Croce, where everyone feared
for their lives, seeing the great stream
and suddenly the waterfall
cast them down.]

Like the other writers, Pucci recollects the passage from Genesis here through his selection of key terms (“la caterratta”). However, he also adds a human dimension as well by noting the fear of the inhabitants, thereby allowing us to experience the disaster through their eyes as it unfolds.³⁸ The water came into the city and

³⁷ All citations of Antonio Pucci's *sirventese* are from Salamone Morpurgo, ed., *La Grande Inondation de l'Arno en MCCCXXX: Anciens Poèmes Populaires Italiens* (Paris: Champion, 1911). All translations are mine.

³⁸ Francesco Salvestrini, “L'Arno e l'alluvione Fiorentina,” (see note 15), 252.

the shopkeepers tried to wall up their stores with clods of dirt (vv. 140–48), and then it rushed into the neighborhood of the glove makers (vv. 156–160). At this point, the city's monuments fell, starting with the Carraia bridge and the walls nearby it (vv. 165–68). Pucci includes his personal experience in the narration, however, mentioning how he too tried to flee when he heard the news that both the Spini bridge and Ponte Vecchio had collapsed:

. . . ed io fugia.
 I' dico ch'io non era a meza via
 a ritornare in verso casa mia,
 ch'i' udi dir che 'l Ponte Vecchio gia
 per l'acqua rotto.
 In fra la gente n'avia gran corrotto
 e chi piangeva, che non facia motto
 tanta tristizia ave' al cor condotto
 questo giorno. (vv. 180–88)

[. . . and I ran off.
 I say that I wasn't even halfway
 back to my home when I heard
 that Ponte Vecchio was being broken
 by the water.
 There was great despair among the people,
 some cried, some were silent,
 because that day had brought so much
 heartbreak.]

The people were dismayed, but worse was yet to come. Pucci describes the debris that washed into the city from as far as ten miles away (vv. 193–96). He relates another person's experience, who saw furniture from the wrecked villages:

E vidine venire, stando un pezzo,
 un letto e la lettiera a pezzo a pezzo
 e altre cose molte, e poi da sezzo
 parecchie arche
 e casse che parean di panni carche:
 e se 'enver lui allora fosser varche,
 el mi giurò che no l'avrebbe scarce
 per paura!
 E riponendo verso l'acqua cura
 (e questa ben li parve cosa scura!)
 Vide vener per la fortuna dura
 in una culla,
 o ver fanciul che fosse o ver fanciulla,
 e non pareo che avesse adosso nulla:

chi le suol dar le cose e chi 'l trastulla
 or che ne fia?
 Egli era vivo e tutta via piagnia,
 e l'acqua forte nel menava via:
 e poi di dietro a lui ratto vegnia
 un greve legno!
 Ed el me dice che li fiece un segno
 dicendo: "Padre, o Signor mio degno
 quel fanciul che non è di morte degno,
 aiuta Iddio!" (vv. 205–28)

[Standing for a while, he saw come along
 a bed and a bedframe, piece by piece,
 and many other things;
 and then at last he saw
 many trunks and chests filled with clothes;
 and if they had been ships coming toward him,
 he swore that he wouldn't have unloaded them
 out of fear.
 Then, turning his attention back to the water
 (and this seemed to him to be a very dark thing),
 he saw coming, because of harsh fortune
 in a cradle
 either it was a small boy or small girl
 who seemed to have no clothes on it:
 the people who fed it or who played with it –
 what became of them?
 It was alive and still crying,
 but the strong water carried it away,
 and behind it came a
 heavy piece of wood.
 He told me that he made the sign of the cross
 saying: 'Father, oh my worthy Lord,
 that child is not deserving of death –
 help it, God!']

The man and the bystanders were helpless to rescue the child and they were only able to utter a prayer for it. But still more flotsam floated before them, including haystacks and dead livestock:

Per Arno ne venivano e telai
 con l'orditura, e capanne e pagliai,
 e dietro a questo poi veniva assai
 d'ogni legname,
 iscope sciolte, ed anche con legrame;
 e una pieta fu pure 'l bestiame;

ancor si vide molta lana e stame
 ed alcun panno;
 e fra la mota ancor molti ne stanno.
 Alcun si rallegrava di quel danno,
 Sapiendo quel ch'e lanaiuoli fanno
 a' menpossenti. (vv. 233–44)

[There came down the Arno
 looms with warps, huts and haystacks,
 and all different types
 of lumber,
 brooms, both unbound and bound;
 and it was a pity to see the livestock,
 and then all the wool and fabrics,
 and some clothing,
 and there is so much more still in the mud.
 Some people rejoiced to see that destruction,
 knowing how wool vendors treat
 the weaker people.]

The tools of the wool trade rushed past and, instead of feeling pity, some people experienced a momentary sense of *Schadenfreude*. Weaving formed the foundation for the Florentine economy,³⁹ and later in the century the harsh exploitation of the wool workers would result in the Ciompi rebellion.⁴⁰ The individuals' delight at the harm coming to the wealthy wool vendors was short-lived, however, as they needed climb atop their own buildings to escape the rising waters:

Persona non s'andò la notte a letto,
 chi fuggì in alto palco e chi sul tetto
 piangiendo [forte], picchiandos'el petto,
 ognun gridava.
 Misericordia ciaschedun chiamava,
 piccoli e grandi forte lagrimava,
 e tale era sul tetto che li dava
 l'acqua a' piedi! (vv. 249–56)

[No one went to bed that night,
 but they went to high balconies or on the roofs;
 wailing loudly, and beating their chests,
 everyone screamed.
 Some called out for mercy,

³⁹ Christopher Hibbert, *The House of Medici: Its Rise and Fall* (New York: Perennial, 1980), 28.

⁴⁰ Gene A. Brucker, "The Ciompi Revolution," *Florentine Studies: Politics and Society in Renaissance Florence*, ed. Nicolai Rubinstein (London: Faber and Faber, 1968), 314–56.

the small and the great shed tears,
and some on the roof felt the water
reach their feet.]

As the people spent the night on their rooftops, they witnessed even more devastation:

La notte cadde il castello Oltrafonte:
la caneva del sal diventò fonte.
Delle pene di qua parte v'ò conte
e non d'oltrarno,
come quel fiume periglioso d'Arno
Ripoli allagò e poi Bisarno
e lavorossi per quell'anno indarno
quel paese!
E Sa'Niccolò poi si distese
e' bo[r]ghignani duramente offese,
perché di nulla non vi fer' difese
e stetter saldi. (v. 265–76)

[That night Castle Altafronte fell;
its salt storehouse became a fountain.
I've only recounted some of the pains
but not those of Oltrarno
and how the dangerous river Arno
flooded Ripoli, and then Bisarno
and how that area labored for
a year in vain.
And it leveled San Niccolò
and it harshly wounded its inhabitants
because none of their defenses
remained solid.]

Like the shopkeepers before them, the inhabitants of the neighborhoods south of the river, such as Ripoli and San Niccolò, tried to hold back the flood waters, but to no avail.

Once again, Pucci includes commentary on the socio-political situation in Florence, turning his attention to its powerful families. The powerful bankers, the Bardi, were forced to flee like felons, and because of their greed they earned their pains (vv. 277–80). In the same breath, Pucci mentions the family that would try to stir up trouble, the Rossi, along with their relatives the Frescobaldi, were stricken by the devastation. All strata of society, he writes, suffered in the catastrophe: “those who were wealthier lost more goods, / and it left the small people destitute” (“chi più ricchi era, più roba à perduta, / e disertata la giente minuta,”

vv. 293–94), He then relates the grief that was common to all Florentines (vv. 309–20). Nevertheless, he insists that the Florentines – or at least, the powerful ones – deserved their punishment due to their greed and the oppression of the poor and weak:

ma veramente che la fu giustizia
che Dio mostrò per punir la malizia
de' fiorentini
che sempre pensan pur di far fiorini
e di far grande inposte a' contadini
e per Firenze a' pover cittadini
gabelle porre (vv. 330–36)

[but truly it was justice that God
demonstrated to punish the Florentines
of their malice.
Because they only think of making money
and of making great demands of the farmers
and of imposing taxes on their poorest
citizens.]

By vespers of the following night, the news circulated that the river was even higher, and panic spread (vv. 337–64). Some families fled, but that option was unavailable to everyone:

Alcun' fugian con tre figliuol' in braccio;
e donne partorir per lo bragaccio
alcuna notte, senz'alcun piumaccio
sotto testa! (vv. 351–64)

[People fled with three children in their arms;
and women gave birth in the mud
for several nights, with no pillows
beneath their heads.]

Pucci focuses once again on the water that flowed out of the city and down the Arno, causing more destruction in Castellina, Pontormo, Empoli, and Castelfranco; Pisa was spared, however, because the river got diverted into Mediterranean before reaching the city (vv. 386–425). Pucci closes the *serventese* moralizing, reminding the Florentines of their greedy ways that inspired God's wrath:

Pensate, Fiorentin', del tempo crudo,
non fate senpre d'avarizia scudo,
pensate che ciascun si parte gnudo

di questo mondo;
 e non dica nessuno: "I' mi nascondo,"
 se ne lo inferno non vuol ir profondo.
 Finito è l'sermintese; ed io rispondo:
 al vostro onore. (vv. 442–49)

[Think, Florentines, of the harsh time,
 and don't make excuses for your greed;
 think about how every person leaves
 this world nude,
 and may no one say, "I will hide from it,"
 unless they want to go to the depths of hell.
 My sirventes is finished: and I answer
 To your honor.]

In conclusion, years before he would versify Giovanni Villani's *Cronica*, Antonio Pucci wrote about the flood in his *serventese*. In it, he appears to agree with the theologians that God caused the flood to castigate the Florentines. He seemingly determines the sins worthy of punishment were those of avarice, the subjugation of the powerless, and political intrigues. In other words, he represents Florence not as a unified socio-political community, but one with multiple viewpoints. However, in the *serventese* Pucci also communicates his personal experience of the flood, discussing the confusion and fear of the people in the city, and describing the terrible sights they witnessed. Pucci reminds us that along with collapsing walls and bridges, human lives were destroyed by the flood.

The Poets Adriano de' Rossi and Marino Ceccoli

The date of Adriano de' Rossi's birth is unknown, but he inherited a farm in 1357, was made *podesta* of Montopoli in Valdarno in 1396, and he dictated his last will and testament in August 1400.⁴¹ One of Adriano's friends was Antonio Pucci, who addressed a sonnet to him, as was Giovanni Boccaccio.⁴² His family, the Rossi, were an ancient noble family that held castles in the countryside between Siena and Volterra⁴³; furthermore, Adriano's great-uncle was the poet Dino Frescobaldi,

⁴¹ Ezio Levi, "Adriano de' Rossi," *Giornale storico della letteratura italiana* 55.164–65 (1910): 201–65; here 203–05.

⁴² Natalino Sapegno, "Adriano de' Rossi," in *Storia letteraria d'Italia: Il Trecento* (Milan: Vallardi, 1973), 397–98.

⁴³ Ezio Levi, "Adriano de' Rossi" (see note 41), 203.

and his great-grandfather was Lambertuccio de' Frescobaldi.⁴⁴ In other words, Adriano was a member of the aristocratic clan that tried to exploit the flood for political gain, and he was a relative of the Frescobaldi, the family that supported them. Indeed, the manuscript containing his three sonnets about the flood, Chigiano L. IV. 131, indicates that he sent them to one Matteo di Dino di Messer Lambertuccio Frescobaldi.⁴⁵ All that being said, it is not clear what Adriano's specific relationship was to the individual who assaulted the member of the Magli family or to the people who wanted to overthrow the government of the *popolani*.

Adriano left a small poetic production comprised of eight extant sonnets. In them, he writes about a range of topics dealing with the society of his times. He satirizes Vieri di Messer Pepo, who was wounded by a member of the Frescobaldi family, along with an unnamed old woman; he also derides the corruption of the judges who oversee trials in Florence.⁴⁶ It is in this context that he discusses the events of November 1333. In his first sonnet about the flood, he expresses his opinion that God sent the flood to punish Florence for its sins:

Acqua nè fuoco nè di gente assedio⁴⁷
 non ci gastigan di crude' peccati
 in che siam lungo tempo dimorati
 e dimoriam senza vergogna o tedio.
 Ma se dall'alto, Dio o 'l suo rimedio
 non ispira la mente degli errati,
 un dì ci veggio tutti profundati
 come dannati, de l'inferno in medio.
 Perch'altro ch'a rubar non si contende
 e vedove e pupilli e menpossente,
 e per danar chi può l'un l'altro vende,
 non riguardando l'amico nè parente.
 Ma io ne priego Que' che tutto intende
 che non perdoni a chi non se ne pente.

[Not water nor fire nor besiegers
 castigate us for all our cruel sins

⁴⁴ Ezio Levi, "Adriano de' Rossi" (see note 41), 205.

⁴⁵ Salamone Morpurgo, *Dieci sonetti storici Fiorentini* (Florence: Tipografia G. Carnesecchi e figli, 1893), 6.

⁴⁶ The sonnets are "La 'nforticchiata barba che tti fai," "Cara compagna del compagno mio," and "Il selvaggiame che viene in Fiorenza," respectively.

⁴⁷ The sonnets of Adriano de' Rossi about the flood are cited from Salamone Morpurgo, *Dieci sonetti storici fiorentini* (see note 45); the translation of them comes from Fabian Alfie, "Adriano de' Rossi, Poesie / Poems," *Mosaici: Learned Online Journal of Italian Poetry: Poetry in Translation*, 2017 (note: the online journal *Mosaici* is now defunct and is no longer available).

that we've lived with for such a long time
and we still live in without any shame.

But if from on high God or His remedy
doesn't inspire the minds of the sinful,
I see us all one day sunk deep down low
like the damned in the middle of hell.

Because we don't strive for anything else
than robbing widows, children, and the weak,
and selling out one another for cash,
even if they're friends or relatives.

But I beg Him who understands all –
don't forgive anyone who doesn't repent!]

Adriano depicts the obstinacy of the Florentines, noting that none of God's tribulations turn them from their sinful living, seemingly echoing the opinion of King Robert that God sends harsh circumstances as an act of mercy to prevent their eternal damnation. Adriano then makes explicit the vices of the Florentines, namely the mistreatment of widows, children, and the weak, along with the betrayal of relatives all for money. Gone is the sense that God employed the planets to bring about the catastrophe, as is any indication of God's mercy. Instead, Adriano closes the poem by calling on God to be harsh in His judgment, asking Him not to forgive anyone who refuses to repent. In his first sonnet about the flood, Adriano takes a moralizing tone, emphasizing the sinfulness of the Florentines.

Adriano's second poem about the flood consists of a sixteen-verse *sonetto caudato*, a sonnet to which he added an additional couplet. In it, he refers to the barrel-like containers, called *tamburi*, that the government installed throughout the city so that people could anonymously denounce the crimes of other individuals.⁴⁸ Thus, he treats the flood as a type of felon because of its destruction. He writes:

Perchè non è messo Arno nel tamburo,
c'ha fatto contra 'l popol di Fiorenza
ed ha fiaccato per la sua potenza
pescaie e le mulina, e rotto 'l muro?

Per qualunque più ferma fè ti giuro
amico mio, ch'io ho questa credenza,
che tre proprietade in una essenza
ci purgheran del nostro viver scuro;
onde che l'F e 'l P in una fonte
in pace non berran, ma sempre in guerra

⁴⁸ See the listing for “tamburo” in *Tesoro della Lingua Italiana delle Origini*: <http://tlio.ovi.cnr.it/TLIO/> (last accessed on Sept. 20, 2023).

ciascun terrà le sue malizie pronte.

E questo è quel che tanto ci afferra;
però preghiamo Dio de l'alto monte
che dal comune stato non ci atterra,
o ci rimandi guerra sì accesa
che ciascun si consumi de la spesa.

[Why wasn't the Arno put in the tamburo
because it's against the *popolo* of Florence,
and it weakened all of its potency
against fishing piers and mills, and it broke down walls?

With the strongest faith ever, I swear to you,
my friend, because I cling to this belief:
Three Properties together in One Essence
will purify us of all our dark living.

Therefore the F and the P from one sole source
will not drink in peace, but will always wage war,
and each will keep its cruel knowledge ready.

And this is what grabs and holds us so much;
but let's pray God that, from its high mountain,
He doesn't lay our Commune's state to the ground
or send us yet another war so bitter
that everyone consumes all of their money.]

The flood deserves denunciation because it was opposed to the *popolo*, the class of non-nobles represented by the government. As we have seen, Giovanni Villani and Antonio Pucci both referred to an unnamed member of Adriano's family who was condemned for opposing the *popolani*. In this poem, Adriano seems to suggest that because of its destructiveness, the flood was as traitorous as his relative; nonetheless, he asserts ironically, no one left an anonymous denunciation of it in a *tamburo*, highlighting the government's inconsistency. He then reiterates the interpretation that the Trinitarian God sent the flood to cleanse the Florentines of their sinful ways. In the last eight verses of the sonnet, he believes that the "F" and the "P," which Salamone Morpurgo interpreted as Florence and Pisa,⁴⁹ will never be in peace, but instead will soon wage war. The statement that the two cities will not drink from the same source may be a veiled reference to the course of the Arno, which was diverted before it destroyed Pisa. Nonetheless, Adriano writes, another conflict will render everyone in both cities penniless. The second sonnet, therefore, builds upon the first. It reiterates the moral message that a wrathful God sent the flood, but he adds a subtle political protest to the work. The government of the *popolani* is selective in what – or whom – it considers to be a

49 Salamone Morpurgo, *Dieci sonetti storici fiorentini* (see note 46), 14.

criminal, and he foresees that its poor leadership will lead to another destructive war.

Adriano's third poem about the flood is another sixteen-verse *sonetto caudato*, and it deals specifically with the loss of the statue of Mars from the foot of Ponte Vecchio:

De' facciasì cercar fin che si trovi
 la pietra dov'egli è Marte intagliato,
 e facciasì ripor nel luogo usato
 per modo ch'Arno mai più non la covi.
 Ch'io ho sognato pericoli nuovi
 per lui contra Firenze e del suo stato,
 che mentre che non fia disotterrato
 maggior fortuna converrà che provi
 Che quella d'Arno, che non fu da ciancia
 anzi fu sì crudele e dolorosa
 ch'a molti fe' e fa doler la guancia.
 Ancor sognai con questo un'altra cosa:
 che se non si dirizza la bilancia
 Firenze mai non istarà in posa.
 Rimordati oggimai la coscienza
 sì che finisca in te ogni sentenza.

[Now, until they find it, let them search
 for the rock on which Mars is sculpted,
 and return it to its usual spot
 so that the Arno no longer hides it.
 Because I've dreamed of new dangers coming
 from him against Florence and its state:
 for as long as it is not discovered
 we'll certainly have greater misfortune
 than what came from the Arno, which was hard –
 instead, it was so cruel and painful
 that it made many people's cheeks suffer.
 And then I dreamed yet another thing:
 that if we don't return to some balance,
 Florence will never again have peace.
 Let every conscience feel remorse so that
 all judgment against you is revoked.]

Adriano seemingly adheres to the popular belief that it will bring misfortune to the city for the sculpture to be removed, so he encourages the city to dredge it from the bed of the Arno. He foresees new troubles coming to the city, worse even than the flood of 1333; in accordance with the previous sonnet, he anticipates another war. He calls on everyone to repent so that further punishment

may be avoided. In conclusion, Adriano's sonnets about the flood repeat the notion that it was a scourge from God for the Florentines' sinfulness. He adds elements suggestive of a socio-political satire, like criticism of the avarice and cruelty of his fellow citizens, and disapproval of the government of the *popolani*. He fears that the current regime will lead to a military conflict with results far more destructive than those of the deluge.

The final person to write about the flood of 1333 is Marino Ceccoli, a notary from Perugia. Little is known about Marino's life, although in 1366 the commune of Perugia sent him as part of a contingent to sign an agreement against the use of mercenary companies.⁵⁰ Three years later, Coluccio Salutati sent him a Latin epistle requesting his assistance to acquire the Chancellorship of Perugia. Ceccoli left a corpus of 25 sonnets, two epistles in Latin, and a *canzone* in a single extant manuscript, Vatican Latin Barberiniano 4036, which was compiled in the 1330s.⁵¹ Several of his poems are amatory, expressing his passionate suffering for a man he calls "lord" ("signore"), but others deal with the conflict between Perugia and the lord of Arezzo, Pier Saccone Tarlati di Pietramala; he also engages in a correspondence about the theological question of free will. In one sonnet, though, he expresses his opinion about the cause of the flood:

Resciolse dai ciel' novo dilluvio,⁵²
aceso già da l'eoropal favilla,
da cui la fiamba acuta se destilla,
ch'à 'n sé recluso l'universo engludio.
Oltra natura l'onde crude al fluvio
ve fuor produtte da Caridde e Scilla,
en ira fo deglie elemente Quilla,
sé confondendo sotto el corso pluvio.
Aspro destin, da le pianete messo
nei fredde segne, par ch'e.lleie s'anide,
sí dai sinistre è visitata spesso.
Onde conviene ormai ch'a Quel se gride,
ch'è Uno e Tre, e Tre sono Uno stesso,
ché la conduca sì ch'a sé la guide.

50 Vittorio Corbucci, "L'antico poeta Perugino Marino Ceccoli e la dominazione dei Tarlati a Città di Castello," *L'alta valle del Tevere: Rassegna bimestrale illustrata* 1.2 (giugno 1933): 3–8; here 4.

51 The information about Marino Ceccoli is from Steven N. Botterill, "Marino Ceccoli," *Medieval Italy: An Encyclopedia*, vol. 2, ed. Christopher Kleinhenz (New York and London: 2004), 684–85. The dating of the manuscript is from Domenico De Robertis, "Censimento dei manoscritti di rime di Dante (VI)," *Studi danteschi* 42 (1965): 419–74; here 435–36.

52 Marino Ceccoli is cited from Franco Mancini, ed., *Poeti perugini del Trecento*, vol. 1, *Marino Ceccoli, Cecco Nuccoli e altri rimatori in tenzone* (Perugia: Guerra, 1996). The translation is mine.

[A new flood was released from the heavens,
lit suddenly from the spark of Eurus
from which the sharp flame is distilled
that contains the universe's destructive force.

The river's rough waves were produced
beyond Nature by Charybdis and Scylla –
she was in a rage with the elements,
confounding them under the hard rain.

Harsh destiny, sent from the planets
in the cold signs, seems to be hidden in her
since she's often visited with disasters.

Hence it's necessary to cry out to
He who is One and Three, and Three are One,
to guide her, so that He can control her Himself.]

It is not clear why Marino, a Perugian, decided to contribute to the discussion about the deluge in Florence. As we have seen, however, Perugia too was affected by the heavy rains at the start of November 1333. Nonetheless, he stresses that the high waters surpassed those of natural causes; making reference to ancient mythology, he describes Nature as enraged. He acknowledges the astrological conjunctions that brought about the storm but emphasizes the need to pray so that the God will hold them at bay. Marino exhorts the Florentines to pray as a means of risk management, a common attitude in the European Middle Ages.⁵³ In short, Marino seems to echo the conclusion reached by the theologians that astrology was the sufficient cause of the flood, but not its necessary cause. Rather, God employed the celestial spheres for His own purposes. Marino too, in other words, proposes the subtle explanation as both natural and supernatural. Like Adriano de' Rossi in his second sonnet (v. 7), Marino refers to a Trinitarian God here (v. 13), suggesting a possible connection between the two poems. However, while Adriano is stern in his condemnation of the unrepentant, nowhere does Marino explicitly present God as wrathful. Rather, he emphasizes the need for prayer, so that God can bring Nature to heel.

In conclusion, Giovanni Villani's second chapter illustrates that, regarding the flood, the people of Florence strove to make sense of a terrible event. The natural philosophers pointed to astrological causes, but the theologians did not accept the planetary conjunctions as a sufficient explanation. Rather, they believed that God employed the celestial influences for His own purposes. The diverse writers of the age repeatedly cited the Book of Genesis to cast the deluge as God's punishment, but they were neither simplistic nor uniform in their perspectives. Some of them,

53 Christopher M. Gerrard and David N. Petley, "A Risk Society?" (see note 28), 1065.

such as Marino Ceccoli, seemingly accepted the theologians’ nuanced claims, seeing the physical causes as being the means for God to enact his broader moral intentions. King Robert II, furthermore, saw the flood as divinely merciful act, with the scope of preventing eternal damnation. Conversely, Antonio Pucci and Adriano de’ Rossi took a sterner moral stance, interpreting the disaster through their own satirical – i.e., cynical – lenses, and using it to score political points in the society of their age. But the calamity was part of a larger pattern that influenced the culture of late medieval Italy. The climate change at the end of the thirteenth century resulted in several dire situations in the northern hemisphere, from an overall drop in temperatures to famines with mortalities between 5–10% in Flanders, and 10–18% in England.⁵⁴ Some data in Italy indicate increased variability in climate as well, such as the expansion of the Alpine glaciers.⁵⁵ The Arno itself began a centuries-long pattern of increased erosion.⁵⁶ It is impossible to say for certain that the transition from the Medieval Climate Anomaly to the start of the Little Ice Age caused the inundation of Florence in November 1333; the Arno floods periodically, such as it did roughly a century earlier. Nonetheless, the changing weather patterns created an environmental crisis in medieval Europe that may have resulted in a reversal of the overall population growth of the previous centuries.⁵⁷ And as we know, a far worse disaster would befall the people of Florence less than two decades later.

⁵⁴ John Aberth, *An Environmental History of the Middle Ages* (see note 5), 51.

⁵⁵ Paolo Nanni, “Facing the Crisis” (see note 7), 176.

⁵⁶ Nazzareno Diodato, Fredrik Charpentier Ljungqvist, and Gianni Bellocchi, “Climate Patterns in the World’s Longest History of Storm-Erosivity: The Arno Basin, Italy, 1000–2019CE,” *Frontiers in Earth Science* 9 (April 2021): 1–19.

⁵⁷ Paolo Nanni, “Facing the Crisis” (see note 7), 170.

Appendix

Antonio Pucci

I. Sirventese

Diluvio che fu in Firenze a dì IV Novembre MCCCXXXIII;
fatto per Antonio Pucci

- | | | |
|--|----|---|
| Novello sermentese lagrimando,
per tutto 'l mondo puo' gir sospirando
e senpre tutta gente ammaestrando | 36 | gli ammaestrava.
E ciascun frate ben lo' predicava
come pe' lor peccati gl'incontrava:
veggendo Iddio che questo non gio[v]ava, |
| 4 di Firenze.
Signor, dicendo, state in penetenza,
non aspettate il dì della sentenza,
ne' vostri fatti aggieate provedenza | 40 | disse: "Aduna!"
E mandò lor sì pessima fortuna
che scurato paria 'l sole e la luna,
tant'era l'aria di nuvoli bruna |
| 8 di ben fare.
Ché voi sapete di quà da mare
non si poteva una città trovare
che fra la gente avesse per volgare | 44 | a tutte l'ore.
Di notte avia la gente gran tremore,
perché non si vedeva alcuno albore,
stella né luna non facea splendore |
| 12 maggior nomanza;
ciascun pareva ch'avesse per usanza
di dir: "Firenze ogni cittade avanza";
e come l'avía 'l nome, di certanza | 48 | in fra la gente.
Non parliàn più di questo conveniente,
torniamo a dir di quel fiume corrente,
ciò fu. . . sì repente |
| 16 era conpiuto.
Or si può dir ched e' le sia caduto,
però ch'a Gesu Cristo è rincresciuto
del popol di Firenze dicateduto | 52 | [in sino a Poppi.
Pel Casentino non trovò rintoppi
se non di fiumi ch'eran grossi troppi
più ch'esser non soleano, in sette doppi, |
| 20 i lor peccati.
Più e più volte pe' tenpi passata
Idio n'à lor miracol mostrati
ed in più guise si à amm[ae]strati,] | 56 | raddoppiando.
Pensate che esser dovea quando
insieme si venieno radunando,
quando Arno era, prima cominciando, |
| 24 chi ben procura.
Sì come dice l'antica scri[ttura],
primamente li puose in [grande altura]
a ciò che ciascheduna cre[atura] | 60 | così grieve!
Del cammin d'Arno i' vi so far più breve,
e vo'vi dir del fiume della Sieve,
com'ella venne, e come la riceve |
| 28 cognoscesse
da Gesu Cristo il ben che de[scendesse],
e po' sicondo a questo sì p[le]ntesse]
de' suoi peccati, [e] senpre a l[ui istesse] | 64 | e seco il mena.]
Questa crudele e diluviosa piena,
secondo che mi fu detta la piena
a molta giente diè l'ultima ciena |
| 32 in orazione.
E non giovando tale ammonizione,
si piacque a lui di nove condizione
mandando lor più volte afflizione, | 68 | senza spada.
E 'n quel punto allagò sì la contrada
che ricoperse d'intorno ogni strada, |

- e disertando va alberi e biada
72 quanto prende,
cacciando a terra tutte le chiudende,
e fra le vigne duramente offende,
e talor case, dove l'acqua scende
76 sì ruvina.
A Remol giunse di sì gran ruvina
che ruppe le gualchiere e le molina,
e poi verso Conpiobbi si dichina
80 come strale.
E di subito giunse a lo spedale
il diluvioso fiume, ch'era tale
che li ruppe. . . li vale
84 serrar. . .
Giunse. . . [three stanzas are missing here]
85 A Roveza' fu l'acqua tanto grossa
che molta gente fe' dell'acqua fossa:
di trentaquattro mai carne né ossa
88 non si vide!
Niente in pian di San Salvi si ride:
quando quel fiume addosso li recide
cominciàro a chiamar con molte stride
92 a Dio pietade.
Quando quel fiume giunse a la cittade,
se m'ascoltate con umiltade
di quel ch'io saprò la veritade
96 vi penso dire.
Dè piacciavi, signor', di soferire
queste parole di volerle udire,
ch'a me diletta molto di seguire
100 il conveniente.
E giunse tanto diluviosamente
ch'el mise a terra il muro di presente
che sostener soleva primamente
104 tutto 'l pondo.
E 'l mur de' frati fu poi il sicondo,
che in più parte l'acqua il mise a fondo,
[ed il vivaio] tutto quanto a tondo
108 [cadde dise]rto.
[Perché di] mota lo lasciò coverto:
[e a u]n uscio percosse ed ebbe aperto,
[e fra] gli frati se n'andò per certo
112 [in Sa]nta Croce.
[E gli fra]ti, veggendo sì gran foce,
[co]lminciàro a gridare ad alta boce:
[“Sign]or, che per noi fosti posto in croce,
116 [mise]ricordia!”
Niente allor avian fra lor discordia:
piangendo tutti quanti di concordia
fuggiro in chiesa, e ciaschedun s'acordia
120 con gran lume.
Lassamo star costor col buon costume
e ritorniamo al periglioso fiume,
sì come ruppe col suo gran volume
124 la forte porta,
quella alla Croce, ove la gente morta
tutta si tene, veggendo la scorta,
e 'ncontanente mandâr giù accorta
128 la cateratta.
L'acqua veniva di foga sì fatta,
che di subito l'ebbe tutta sfatta,
e rienpie, correndo molto ratta,
132 ciascun borgo.
In buona verità ch'io ver vi porgo
che quando i' vo' a veder la Croce a
Gorgo,
di quell'ocche la piena fe' m'accorgo
136 ch'io spavento!
E 'n sulla terza con grave tormento
tutta la Città Rossa a compimento
fu piena d'acqua: e con grave lamento
140 si gridava,
e per la terra rimor si levava
sì come l'Arno la città allagava;
e' bottegai ciaschedun murava
144 co le zolle.
Sperando ch'el scemasse, ognun fu folle
de lo sconbrare, e quando far lo volle
trova la casa d'acqua tutta molle.
148 E senpre alzava!
Sì che d'andar ne l'acqua ognun dottava
e tutto suo arnese abbandonava:
così fuggendo, ciaschedun montava
152 per le scale.
A nona l'Arno fu sì grande e tale,
che quel cotal che di veder li cale
le case del Cumun vid' andar male
156 a sé davanti,
là dove si facien le borse e' guanti:
lodato ne sia Dio con tutti i Santi
ch'a' bottegai ne canpò alquanti
160 la persona!
E, poco stando, fra vespro e la nona,

sì come per chi 'l vide si ragiona,
 il fiume ruppe, che sì forte sprona,
 164 ogni pescaja;
 e fe' cadere il ponte alla Carraja
 e 'l mur che confinava con Verzaja;
 e de la torre, perché più si paja,
 168 lasciò scheggia;
 perché la gente tutta quanta 'l veggia
 com'Arno n'ha levata la soveggia,
 sì come piacque a Dio che signoreggia
 172 Salvatore.
 E la famiglia di ciascun rettore
 alla guardia de' ponti era a furore,
 e non passava grandi né minore
 176 più ch'un per volta.
 E pur prontava a lor la gente stolta,
 e di voler passar ciascuno affolta;
 a presso 'l ponte degli Spin fu in volta:
 180 ed io fugia.
 I' dico ch'io non era a meza via
 a ritornare in verso casa mia,
 ch'i' udì dir che 'l Ponte Vecchio gia
 184 per l'acqua rotto.
 In fra la gente n'avìa gran corrotto,
 e chi piangeva, chi non facia motto,
 tanta tristizia ave' al cor condotto
 188 questo giorno.
 Andar non si poteva punto a torno
 e chi oltrarno faceva soggiorno
 a casa sua non potea far ritorno,
 192 a sua famiglia.
 Dè, ascoltate ben gran maraviglia,
 che da la lungi più di dieci miglia
 venian le cose, come l'acqua piglia
 196 ogni gran peso.
 Secondo ch'io per quel che 'l vide [ho]
 inteso,
 che fu da l'acqua duramente offeso
 e vide il fiume, quando più fu steso,
 200 e tutte quante
 le cose che metteva a sé davante:
 el mi giurò a le guagnele sante
 ch'el non credeva ch'el n'avesse tante
 204 di qui a Arezo.
 E videne venire, stando un pezzo,
 un letto e la lettiera a pezzo a pezzo,
 e altre cose molte, e poi da sezzo

208 parecchie arche
 e casse che parean di panni carche:
 e se 'never lui allor fosser varche,
 el mi giurò che no l'avrebbe scarce
 212 per paura!
 E riponendo verso l'acqua cura
 (e questa ben li parve cosa scura!)
 vide venir per la fortuna dura
 216 in una culla,
 o ver fanciul che fosse o ver fanciulla,
 e non pareva ch'avesse addosso nulla:
 chi le suol dar le cose e chi 'l trastulla
 220 or che ne fia?
 Egli era vivo e tutta via piagnia,
 e l'acqua forte nel menava via;
 e poi di dietro a lui ratto venia
 224 un greve legno!
 Ed el me dice che li fiece un segno,
 dicendo: "Padre, o Signor mio degno,
 quel fanciul che non è di morte degno,
 228 aiuta, Iddio!"
 Giù per quel fiume ch'era tanto rio
 più cose venner ch'io no le vid'io
 ma i'ò scritto il vero da que' ch'io
 232 d'altrui ascoltai.
 Per Arno ne venivano e telai
 con l'orditura, e capanne e pagliai,
 e dietro a questo poi veniva assai
 236 d'ogni legname,
 iscope sciolte, ed anche con legame;
 e una pieta fu pure 'l bestiame;
 ancor si vide molta lana e stame
 240 ed alcun panno;
 e fra la mota ancor molti ne stanno.
 Alcun si rallegrava di quel danno,
 sapiendo quel ch'e lanaiuoli fanno
 244 a' menpossenti.
 Dè siate d'ascoltar me sofferenti,
 ed io vi conterò di gran tormenti,
 come la notte fur, per ognun venti,
 248 v'inprometto.
 Persona non s'andò la notte a letto,
 chi fuggì in alto palco e chi sul tetto,
 piangiendo [forte], picchiandos'el petto,
 252 ognun gridava.
 Misericordia ciaschedun chiamava,
 piccoli e grandi forte lagrimava,

e tale era sul tetto che li dava
 256 l'acqua a' piedi!
 Quel cotal forte gridava merzede
 mentre che 'l fiume addosso andar
 si vede:
 e veramente la notte si crede
 260 affogare.
 Al fiume ritto vi vo' ritornare
 com'el fe' tutto il borgo ruvinare
 dov'e cappelli si solevan fare
 264 dal Vecchio Ponte.
 La notte cadde il castello Oltrafonte:
 la caneva del sal diventò fonte.
 Delle pene di qua parte v'ò conte
 268 e non d'oltrarno,
 come quel fiume periglioso d'Arno
 Ripoli allagò e poi Bisarno:
 e lavorossi per quell'anno indarno
 272 quel paese!
 E per Sa' Niccolò poi si distese
 e' bo[r]ghigiani duramente offese,
 perché di nulla non vi fer' difese
 276 e stetter saldi.
 E' Bardi, che d'aver son così caldi,
 fiesci fugire a guisa di rubaldi
 quel fiume; [e] si fe' a' Rossi e
 Frescobaldi
 280 grande oltraggio.
 Sì come per chi v'era udito l'aggio,
 el fu tant' alto e forte per via Maggio,
 ch' a' lanaiuoli fe' molto dannaggio
 284 e 'n tutto 'l sesto.
 Dello rimar d'oltrarno tosto resto
 e nella maggior parte torno presto:
 o Gesu Cristo, che dolor fu questo
 288 e che sconfitta!
 Po' ch Firenze fu prima diritta,
 in nulla parte si truova scritta
 ched ella ricevesse una trafitta
 292 sì aguta:
 chi più ricchi era, più roba à perduta,
 e disertata la giente minuta.
 A mezza notte l'acqua fu cresciuta
 296 oltre misura:
 molta gente di morte era sicura,
 sed el non fosse la grande rottura
 che 'n quel punto fiecero le mura

lungo il Prato.
 Come 'l fium' ebe suo cammin trovato,
 incontanente fu molto scemato,
 e 'l giorno, ch'era molto disiato,
 304 fu presente.
 Contato v'ò del giovedì dolente
 e de la notte che poi fu siguente,
 or vi dirò del venerdì vegnente
 308 furtunale.
 O Gesu Cristo, re cilistiale,
 questa fortuna come fu mortale,
 che chi di padre e chi fratel carnale
 312 forte si duole;
 chi piangeva figliuoli e chi figliuole
 e chi persona a chi molto ben vuole,
 e chi piangeva l'aver ch'aver suole;
 316 ma bene è stolto!
 E chi per ira si graffiava il volto
 veggendo quel che l'acqua gli avea tolto,
 chi vedea di suo grano e di vin molto
 320 grande strazio.
 E chi diceva: "Cristo ne rengrazio,
 che a me à conceduto tanto spazio
 che io son di confessarme sazio,
 324 ch'avìa temenza
 di non morire senza penitenza:
 or son pentuto d'ogni mia fallenza,
 lodato sia la divina potenza
 328 con letizia!"
 Dè come fu crudel questa tristizia!
 Ma veramente che la fu giustizia
 che Dio mostrò per punir la malizia
 332 de' Fiorentini;
 che senpre pensan pur di far fiorini
 e di far grande inposte a' contadini,
 e per Firenze a' pover cittadini
 336 gabelle porre.
 A vespro boce per la terra corre,
 com' a la gente diletta d'aporre,
 ch'un fante de prior' di su la torre
 340 avia veduto
 il fiume d'Arno sì forte cresciuto
 ch'era magior che quel ch'era venuto:
 alcun' di verità l'ebbor creduto,
 344 e tosto corse
 e fra la gente la novella porse
 di veritade, e no' la mise in forse.

E come, quando son cacciate, l'orse
 348 van correndo,
 così veniva la gente fuggendo,
 e grandi e picolini, ognun piangendo,
 e venivansi tutti riducendo
 352 a le montagne.
 E chi suo padre e chi suo fratel piagne
 e chi per la sua madre sì dà lagne,
 chi pel figliuolo lo viso s'infragne
 356 a mal partito;
 dicendo: "lass'a me, ch'i' l'ò smarrito,
 ed è sì fortemente sbigottito
 che 'n una fossa d'acqua serà gito!
 360 or come faccio?"
 Alcun' fugian con tre figliuol' in braccio;
 e donne partorir per lo bragaccio
 alcuna notte, senz'alcun piumaccio
 364 sotto testa!
 La notte d'acqua fu sì gran tenpesta
 che 'nfino a giorno chiaro non fe' resta:
 in sulla chiesa fer' pietosa festa
 368 i fra' minori,
 e ficionvi l'altar co molti onori,
 pregando Iddio per tutti e peccatori:
 fin che del giorno vidono gli albori
 372 fer disciprina.
 [17 stanzas are missing here]
 373 [e qui lasciano
 da altra parte quel fiume villano:
 per lui Legnaia à lavorato invano,
 a Settimo guastò di molto grano
 377 e giunse a Signa.
 Molti affogoro in quell'acqua maligna,
 e allagò [ogni] terra, casa e vigna,
 poi Montelupo e Capraia avvigna
 381 sempre [e] rinnalza.
 Fra que' due poggi [si forte] rinbalza
 che molte case di mota rin[c]alza,
 la maggior parte de' fondamenti scalza
 385 e caccia in terra.
 Verso la Castellina fece guerra
 intorno a' poggi, ma none a la terra,
 perch'era alta, ma da piè l'afferra
 389 il fiume grande.
 A molta gente diè mortal' vivande,
 di pianto fe' alla Castellina bande
 el crudel fiume, [e] per lo pian si spande

393 di Puntormo.
 Io, che di sapere il ver non dormo,
 mi disse un de la contrada enformo
 chi vi sonavan le canpane a stormo
 397 e a Martello.
 Quel borgo di fuor, ch'era sì bello,
 lo disertò affatto il fiume fello,
 e fece dentro a Enpoli drappello
 401 a l'una faccia.
 Quelle mura tutte in terra caccia:
 qualunque casa di rapina abbraccia,
 per viva forza convien ch'ella caggia
 405 a terra rotta!
 Più e più casamenti in poca d'otta
 mandò in terra quella piena allotta,
 poi subitamente fu ridotta
 409 a Santa Fiore.
 L'Elsa, che a far solea a maggior amore,
 con Arno insieme vennon d'un colore,
 e fe' morir molta gente a dolore
 413 colla sua onda.
 Quando ch'ebbe passato Santa Gonda,
 il fiume per lo pian sì forte abonda
 che disertò Fucecchio, e poi seconda
 417 senza manco
 [in verso] Santa Crocie niente istanco;
 e diviando passò Castelfranco,
 e andò guastando dal lato manco
 421 e fe' divisa.
 Se non avesse tenuto alla ricisa
 mal condott'era la città di Pisa,
 ma pur così vi fu caro di risa
 425 e grieve pianto.
 O Padre, o Figlio, o Spirito Santo,
 come allagò [la piena] d'ogni canto
 e raddoppiò il dolor quattro cotanto,
 429 ciò è mio avviso.
 [D]el fiume d'Arno vi vo' far diviso
 e a' Fiorentini tornare a riciso:
 sed e' fecion mai mal, per non diviso
 433 son or viziati!]
 Idio gli à ora un poco gastigati,
 ma non come son degni esser pagati:
 di dirvi come poi sono amendati
 437 non bisogna!
 Sed io fino a qui dett'ò menzogna,
 al parer mio el no' m'è già vergogna,

però ch'io non stetti ma' a Bologna
 441 ne lo Studio.
 Pensate, Fiorentin', del tenpo crudo,
 non fate senpre d'avarizia scudo,
 pensate che ciascun si parte gnudo

di questo mondo;
 e non dica nessuno: “I' mi nascondo,”
 se ne lo inferno non vuol ir profondo.
 Finito è 'l sermintese; ed io rispondo:
 449 al vostro onore.
 Amen amen.

II. Antonio Pucci: From the *Centiloquio*

Capitolo che parla solamente della gran pestilenza del diluvio che in Firenze offese tanta gente ch'a voler far ciò ch'el fe' manifesto non basteria maggior libro che questo

Ognor ch'i' mi ricordo del millesimo
 trecentotrentatrè m'è tanto oltraggio
 3 ch'io esco quasi fuor di me medesimo
 considerando che se giugno e maggio
 Firenze stat'era in festa e letizia,
 6 come dinanzi ne vedesti saggio,
 poco indugiò, che dopo la dovizia
 dell'allegrezza tutti i suoni e canti
 9 le tornarono in pianto e in tristizia.
 Dico che la mattina d'Ognisanti
 incominciò senza restare a piovere
 12 nella città e ne' luoghi circostanti;
 né mai si vide tal modo rimuovere
 la notte e 'l dì, sì che continuando
 15 fe' molti cuori a lagrimar commuovere,
 perché l'aria, tonando e balenando,
 diventat'era tanto spaventevole
 18 che non ci si dormia dubitando.
 Lunedì cominciò il tenpo spiacevole,
 e 'l Casentin, pian d'Arezzo e 'l Valdarno
 21 guastaro i fiumi, ch'ognun fu nocevole.
 Mettendo poi la Sieve grossa in Arno,
 guastando venne colla sua rapina
 24 pian di Sansalvi, Ripoli, e Bisarno:
 pescai' ronpendo, gualchiere e mulina,
 persone e bestie e cose moltitudine
 27 innanzi si mettea sera e mattina.
 Sì che savamo in grande amaritudine
 dimenticata avamo ogn'altra guerra,

30 e tutta gente con sollecitudine
 chi si fuggia di fuori della terra
 con tutta sua famiglia di concordia,
 33 chi nell'altezza del vicin si serra.
 Da giorno a notte avea poca discordia
 tant'era tenebroso in ogni canto,
 36 gridando in boce ognun “misericordia!”
 Fuor della terra crebbe l'Arno tanto,
 ched alla Croce la porta fortissimo
 39 mise per terra, onde raddoppiò il pianto
 veggendo giugner la piena
 grandissima:
 e questo fu il mercoledì notte.
 42 E poi che l'acqua ci fu tanto altissima,
 ebbe le mura di lungarno rotte
 e 'l mur de' fra' Minori, e più di un cubito
 45 alzò tra lor, crescendo a tutte l'otte.
 Onde in sul tetto della chiesa subito
 fugiro i frati e fecervi l'altare,
 48 temendo di morir, di ciò non dubito;
 e quivi poi con divoto cantare
 disser la messa con gran luminaria,
 51 né le canpane stavan di sonare.
 Tant'era scura e tenebrosa l'aria,
 che la veduta d'uomini e di donne
 54 con tutti quanti i lumi era contraria.
 E come a presso qui memoria fonne,
 continuando, a San Giovanni, il crescere,
 57 l'acqua alzò più che mezze le colonne:

e l'Arno già non ristava di mescere,
 e guastò in parte il castello Altrafonte,
 60 dov'era il sal, ch'a molti ne fe' increscere.
 De' quattro non rimase altro ch'un
 ponte:
 tre ne fece cader la piena orribile,
 63 ch'un braccio e più fu sopra il
 Rubaconte.
 E come fu a molti assai visibile,
 cadder le case ove si facea l'arte
 66 di cervelliere, ch'era assai possibile.
 E cadde allora la statua di Marte,
 a cui gli antichi facean riverenza
 69 sì come a dio: e questo abbi per carte
 ch'al Ponte Vecchio facie risedenza,
 e mai non si rivede sua figura.
 72 Poi, dimostrando l'Arno sua potenza,
 fece cader la torre colle mura
 lungarno a San Friar, come qui dicolo,
 75 e po' quelle del Prato in gran misura.
 Se ciò non fosse stato, a gran pericolo
 era questa città, ché ben sei braccia
 78 ci fu l'acqua alta per alcun ramicolo;
 ma come aperto fu da quella faccia,
 l'acqua della città cominciò a scendere
 81 e l'aria alquanto a tornare in bonaccia.
 La terza notte poi, per darti a
 'ntendere,
 rimase la città piena di mota,
 84 sì come senza detto puoi comprendere.
 La gente, ch'era in quella notte (nota!)
 fuggita alle montagne, s'alleggarono
 87 quando d'acqua sentìr Firenze vota:
 niente allor le porti si serrarono
 sì che innanzi ch'apparisse il giorno
 90 uomini e donne alla città tornarono;
 e io fu' l'un di que' che fe' ritorno.
 E poi ch'alquanti di così fu vàrico,
 93 non parve stato mai cotale scorno;
 ma pur si cominciò nuovo rammarico,
 però che tra' possenti furon certi
 96 che di danno portaron grande incarico.
 E perché allo sgonbrar non furo
 esperti
 perderon biada e cose senza noveri;
 99 onde s'e ricchi fur così disertì,
 dè pensa come star dovieno i poveri,

che quand'è il tempo più bello e più
 magno
 102 truovan di rado alcun che gli ricoveri.
 Ma Iddio provide e diede lor guadagno
 a sgonbrar per le volte l'acqua torbida
 105 e altre cose ch'era d'altrui lagno;
 perché que'ch'eran usi a vita morbida
 non potean così durar l'affanno
 108 come que' che senpre la fèr sorbida.
 A larga stima, ricevette danno
 il Comun di fiorin dugientomilia,
 111 sì come molti chiaramente sanno;
 e' cittadini ancor di gran mobilia,
 ché tale avie fatta endica di grano
 114 che poi non ebbe per la sua famiglia.
 Dalla parte di sotto per lo piano
 Legnaia, Brozzi, Canpi con Peretola
 117 e altre ville seminaro invano;
 e come casa mal murata sgretola
 di molte l'Arno fe' lungo la riva:
 120 ed io il so, ben ch'i' sia un pascibietola.
 Da ogni parte la gente fuggiva
 in sino a Pisa, sì com'io t'incronico,
 123 alla montagna, per trovarsi viva;
 e se non fosse il grande fosse
 Arnonico,
 là dove l'Arno si volse alla schisa,
 126 cacciava a terra di Pisa ogn'intonico.
 E pur così le diè caro di risa,
 con ciò sia cosa ch'al subito giugnere
 129 allagò la maggior parte di Pisa;
 e di paura a molti fe' il cor pugnere,
 sì che avresti veduto d'ogni grado
 132 la gente per temenza gli occhi mugnere.
 E molto danno fece in quel contado
 di persone e di case nel suo correre
 135 in fin che vicitò San Piero in Grado:
 e quivi poco si poté soccorrere,
 ma piangendo, chi v'era, ad alta boce,
 138 a salvamento s'ingegnò ricorrere.
 Come l'énpito d'Arno mise in foce
 più di trecento, a cui tolto avea 'l vivere,
 141 il mare cacciò di fuor da sé veloce;
 gli alberi dibarbatì e vigne livere,
 semente guaste e molti panni e lana
 144 non sen' potrebbe chiaramente scrivere!
 Né solamente fu qui la fiumana,

ché tutti i fiumi usciron di lor termini
 147 general quasi per tutta Toscana;
 e trasser della terra molti vermini,
 i quali usciron d'alcuna montagna,
 150 dove mi par che tal sementa germi.
 A presso, nelle terre di Romagna
 gran danno mostra che facesse il Tevero
 153 e a Castello e al Borgo e sua compagna,
 Perugia e Todi (e fuor del corso
 scevero
 Romagna e Orbvieto), e 'n quel di Siena
 156 e in Maremma, come qui persevero.
 E' fiorentini, dopo questa mena,
 non si trovaron di farina polvere
 159 per le mulina guaste dalla piena:
 mancando loro disinare e asciolvere,
 da' vicin' fur soccorsi per certanza.
 162 di farina di pan facendo solve.
 Prato e Pistoia cominciar la danza,
 e Colle e Poggibonzi sollecito
 165 ciaschedun fu, e miserci abondanza;
 per la qual cosa, al mi' parere, è lecito
 di mantenergli sempre per amici
 168 e non dimenticar quel ch'io ti recito.
 Veggendo i fiorentin che pe' difici
 delle pescaie e de' mulin' terragnoli
 171 Firenze fu per gire alle pendici,
 per isgonbrar all'Arno i suo' rigagnoli
 si riformò né molin né pescaia
 174 dumila braccia fussi presso a' Magnoli;
 Né in fra' ponti, a pena di migliaia,
 non si dovessi alcun dificio mettere,
 177 né dal lato di sotto alla Carraia.
 Non eran quasi rasciutte le lettere
 che que' che fece la legge, davante
 180 a tutti gli altri la volle dimettere;
 e però disse bene il nostro Dante:
 l'un di si fanno leggi con gran prolaghi
 183 e l'altro di son guaste tutte quante!
 Fessi questione appresso fra gli
 strolaghi
 e naturali e savì in iscrittura
 186 religiosi e maestri teolaghi,
 se questo fu per corso di natura,
 per accidente, o per divin giudizio,
 189 e donde nacque tal disavventura;
 e molti disser che cotale indizio

fu per congiurazion d'alcun pianeto
 192 al qual convene far cotale ufizio.
 E un maestro saputo e discreto,
 di que' di San Francesco, disse in predica
 195 che ogn'altro giudizio avea divieto
 salvo che quello che mai non inpedica,
 ciò è il voler di Dio, che dà e tolle
 198 al suo piacer, così ferisce e medica:
 e questo fu così come Iddio volle,
 e contro al suo voler non ha rimedio;
 201 e più figure fe' e dichiarolle.
 Ma non volendo, lector, darti tedio,
 le lascio star, ché seguendo il tenore
 204 diresti: “questi m'à posto l'assedio!”
 Or vegno a dir quel che dice l'Autore
 di quelle avversità che nel preterito
 207 i'ò veduto alla città del fiore;
 e raccontarne alcune non mi perito.
 Prima, la division, che ancor non manca,
 210 tra' Guelfi e' Ghibellin, con aspro merito;
 a presso poi la parte Nera e Bianca,
 che ogni amor di Firenze fe' mietere
 213 per modo tal che ne rimase stanca.
 Poi messer Carlo raccontò le cetere
 cacciando i Bianchi, e diede vinto il
 giuoco
 216 a' Neri, di cui più non vo' ripetere.
 Poi, nel trecentoquattro, il crudel
 fuoco;
 nel dodici la guerra dello 'nperio,
 219 che fece a noi gran male e a sé ben poco:
 ch'avendo Arrigo grande desiderio,
 nel tredici morì per gli cammini,
 222 come dicemmo quando fu misterio.
 E poco dopo li detti confini
 venne in Firenze la grande mortalità;
 225 poi la sconfitta di Montecatini.
 Maraviglia è come persona ci álita!
 Ché della guerra si riprese il fascio,
 228 né mostrò la città d'essere infrálita.
 Appresso fummo sconfitti ad
 Altopascio:
 poi il caro grande e la città famelica,
 231 che, parte ch'io lo scrivo, ne trambascio!
 Da men Firenze che non è Matelica,
 per le pene sofferte, esser dovrebbe;
 234 ma sormontata n'è per grazia angelica.

Dall'una all'altra assai piccol
temp'ebbe,
fiorini spese a seme di Papavero,
237 tanti ch'a raccontar poco sarebbe.
Poi, come dissi, ci fu contro il Bavero,
che ci crebbe anche le pene e gli affanni;
240 po' si parti a guisa di mugávero.
Appresso avemo contro il re Giovanni;
po' il diluvio. Onde vien la sentenza
243 dell'Autor, che dice senza inganni:
essendo tutte quante in una essenza,
non sarebbe, secondo il parer mio,
246 quanto portò la detta pistolenza.
Ma questa e l'altre avversità prov'io
che non dobbiàn recarlecì ad ingiuria,
249 ma per l'offese che facciamo a Dio,
vivendo in avolterio e in lussuria,
il prossimo offendendo ogni stagione
252 con ogni disonesto modo e furia.
E se non fosse le buone persone,
avviso m'è che l'alto re di gloria
255 ci avrie battuti con peggior bastone!
Quando arrecata fu alla memoria
al re Uberto nostra avversitate
258 si dolse molto di sì fatta storia:
una lettera scrisse con pietade
a que' ch'erano allor nel prioratìco,
261 con santi detti e altre autoritate.
E tre parti contenne, com'io pratico:
l'una, che noi conportassimo in pace
264 l'avvenimento dell'Arno salvatìco;
e la seconda, che molto mi piace,
che de' peccati noi ci correggessimo
267 ed ammendassimo il tenpo fallace;
la terza fu, che noi di lui prendessimo
verace sicurtà, ch'alla bisogna

270 non mancherebbe in ciò che noi
chiedessimo.
Non fe' così il legato di Bologna,
ma funne lieto, e disse: "e' mi sconfissero
273 presso a Ferrara. . ." (e non disse
menzogna!).
Dopo il diluvio certi grandi dissero:
"ronpasi il popolo e 'l ponte si tagli
276 acciò che que' di là non ci assalissero";
e un de' Rossi fedì un de' Magli,
qual era popolan se ben considero,
279 e 'l popol s'armò tutto a que' travagli.
E quando gli altri grandi questo
viderò,
non seguitaro il mal cominciato
282 e 'ntorno al fatto con senno provvidero;
onde quel che fedì fu condannato
come si convenía secondo l'ordine,
285 e 'l popol si rimase nel suo stato.
Non so, lettor, se tu com'io ricordine
che certi passando Arno in una nave
288 si volser sottosopra per poc'ordine:
quindici n'affogaro in men d'un'ave,
gli altri canpâr per grazia dell'altrissimo,
291 e non senza paura e pena grave,
però che l'Arno allora era
grandissimo;
ma tanto furon d'intorno soccorsi
294 ch'egli scanpâr di punto sì fortissimo,
e forse bevver più di cento sorsi.
Poi di legname ponti s'ordinarono,
297 che 'n picciol tempo finiron lor corsi;
e forti e belli poi s'edificarono
come son' oggi, né credo che mai
possan mancar, tanto ben si fondarono.
301 E del diluvio detto abbiamo assai.

Antonio Pucci

I. Serventes

The Flood that Took Place in Florence on the Fourth Day of November, 1333;
written by Antonio Pucci

You can go through the whole world
weeping,
sighing, new serventes, and instructing
everyone, always, about
4 Florence.
“My lords,” saying, “be penitent –
have the prudence in all your actions
not to wait till the Day of judgment
8 to do good actions.
Because you know that no one
could find,
from here to the sea, another city
that was more famous in
12 the vernacular;
it seems like everyone had the custom
of saying: ‘Florence surpasses every
other city, and it had that reputation
16 with complete certainty.
Now it can be said to have fallen
since the sins of its decadent people
were found to be displeasing
20 to Jesus Christ.
Many – but many! – times in the past
God displayed His miracles to them,
and in many ways taught them to
24 to acquire goodness.
Just as the ancient scripture says,
first He raises His creatures
up to great heights so that they
28 might understand
that goodness flows down from Jesus
Christ
according to someone’s repentance
of their sins, and how they
32 listen to Him.
When they didn’t heed His warnings,
He found it pleasing to instruct them
by sending them new afflictions under
36 strange conditions.
Every friar preached it well to them

about how their sins would bring
misfortune,
but seeing how this didn’t help
40 God said: ‘I’ll lay them low!’
Then He sent them the worst weather
that seemed to darken the Sun and
the Moon,
and the sky was dark with clouds
44 at all times.
At night the people trembled greatly
because no one could see any light –
neither the Moon nor the stars
shone down
48 on the people.
But let’s not speak further about
that time;
instead let’s return to the flowing river
which was so [. . .] full
52 up to Poppi.
Nothing blocked it in Casentino,
but instead it met other rivers
overly swollen beyond their custom –
56 double sevenfold!
Imagine what it must have been like
when, joining together with it,
the Arno was already, from its source,
60 so very high!
I want to be brief about the course of
the Arno,
and I want to tell you about the Sieve
River –
how it came, and how it received it,
64 and how it flowed with it.
This cruel and disastrous flood,
according to the pain that was narrated
to me,
without so much as a sword, gave people
68 their last supper.
At that point, it flooded the countryside
and it covered over every nearby street,

washing away all the trees and pasture
 72 it could take,
 knocking all the hedgerows to the
 ground,
 and harshly damaging the vineyards,
 and at times leveling the houses
 76 as the water comes down.
 It brought to Remolo such harm
 that it destroyed the mills and fulling
 mills,
 and then it shot down toward Compibbi
 80 like an arrow.
 And then the flooding river came
 to the hospital and was such
 that it broke [. . .] worth it
 84 to close [. . .]
 It came. . . [three stanzas are miss-
 ing here]
 85 The water was so high in Rovezzano
 that many people had watery graves;
 neither flesh nor bone was ever seen
 again
 88 of thirty-four people.
 There was no laughter on San Salvi's
 plain:
 when that river came upon them
 they began to shriek out for God
 92 to take pity on them.
 I hope to tell you now what I know
 of the truth about when that river
 reached the city, if you will humbly
 96 listen to me.
 May it please you, my lords,
 to allow yourselves to hear these words,
 for I wish to cover only what is
 100 necessary.
 Then it came on, floodingly,
 and it laid to the ground the wall
 that usually held back the weight
 104 of the water;
 Next, the water brought down part
 of the wall of the friars to its
 foundations,
 and their gardens all around it
 108 were left deserted.
 Because it left everything covered
 in mud,

and it struck and leveled the gate,
 and it followed all the friars
 112 into Santa Croce.
 When the brothers saw this strong flow,
 they began to shout with strong voices:
 'Mercy, dear Lord – you who were put
 116 on the cross for our sins!'
 There was no disagreement
 among them –
 weeping, they all fled together
 into the church where they gathered
 120 in its bright light.
 With courtesy, let's leave them,
 and return to the dangerous river,
 and how, with its volume, it broke down
 124 the strong door
 of Santa Croce, where everyone feared
 they would die, seeing how the cascades
 sent all the debris down
 128 upon them.
 The water came on with such force
 that as soon as it destroyed everything,
 it ran quickly through every
 132 neighborhood.
 In truth – for I'm relating the truth –
 whenever I go to see the Cross at Gorgo,
 and when I realize what the flood did
 there,
 136 I grow fearful again.
 By Terces, with much suffering
 the entire Red City was completely
 filled with water; and people were
 wailing
 140 their grave laments.
 Cries were raised across the land
 that the Arno was flooding the city,
 and the shopkeepers used dirt clods
 144 to wall up their shops.
 Hoping that it would abate, some people
 were foolish about not saving their
 goods;
 but when they returned they found they
 houses swamped –
 148 still the water rose!
 Everyone feared to go into the water
 and to leave behind all their things,
 so some people fled by running

152 up their stairs.
 By Nones, the Arno was so high, and of
 such strength
 that, like a person who cares to see,
 I looked and saw before me the ruin
 156 of the houses
 where, in the Commune, they made
 gloves and purses – praise God and His
 saints
 that those shopkeepers got out
 160 with their lives!
 A little while later, between Vespers and
 Nones,
 as those who saw it tell me,
 the river pushed so hard it broke
 through
 164 every fishing pier,
 and it caused the bridge of Carraia
 and the wall around Verzaia to fall;
 then, to show its strength, it left the
 tower
 168 in shatters.
 So that the people all around might see
 how the Arno lifted it off its base
 just as the Lord Savior, who reigns
 over all,
 172 desired.
 The families of all the leaders
 who guard over the bridges were in
 a fury
 and they didn't let people – neither the
 great nor the small –
 176 to pass except one by one.
 And still, the foolish ones prompted
 them to allow groups to pass over;
 soon the Spini bridge collapsed
 180 and I ran off.
 I say that I wasn't even halfway
 back to my home when I heard
 that Ponte Vecchio was being broken
 184 by the water.
 There was great despair among the
 people,
 some cried, some were silent,
 because that day had brought so much
 188 heartbreak.
 No one could go any further,

and those people who lived across
 the Arno
 couldn't return to their homes,
 192 to their families.
 Now listen to this great marvel:
 things flowed in from ten miles away
 because the water could lift up
 196 and great weight.
 I learned from someone who saw it
 and who was badly hurt by the water
 that he saw the river when it was widest
 200 and everything
 that it pushed before itself;
 and he swore on the Holy Gospels
 that he didn't think there was so much
 stuff
 204 from here to Arezzo!
 Standing for a while, he saw come along
 a bed and a bedframe, piece by piece,
 and many other things;
 208 and then at last he saw
 many trunks and chests filled with
 clothes;
 and if they had been ships coming to-
 ward him,
 he swore that he wouldn't have un-
 loaded them
 212 out of fear.
 Then, turning his attention back to the
 water
 (and this seemed to him to be a very
 dark thing),
 he saw coming, because of harsh
 fortune
 216 in a cradle
 either it was a small boy or small girl
 who seemed to have no clothes on it:
 the people who fed it or who played
 with it –
 220 what became of them?
 It was alive and still crying,
 but the strong water carried it away,
 and behind it came a
 224 heavy piece of wood.
 He told me that he made the sign of the
 cross
 saying: 'Father, oh my worthy Lord,

that child is not deserving of death –
 228 help it, God!
 Other things came down that evil river,
 things that I didn't see but other people did,
 and I'm writing about them because
 232 it was the truth.
 There came down the Arno
 looms with warps, huts and haystacks,
 and all different types
 236 of lumber,
 brooms, both unbound and bound;
 and it was a pity to see the livestock,
 and then all the wool and fabrics,
 240 and some clothing,
 and there is so much more still in
 the mud.
 Some people rejoiced to see that
 destruction,
 knowing how wool vendors treat
 244 the weaker people.
 Please be patient and listen to me,
 and I will recount more great torments
 which were twentyfold for everyone that
 night,
 248 I promise you.
 No one went to bed that night,
 but they went to high balconies or on the
 roofs;
 wailing loudly, and beating their chests,
 252 everyone screamed.
 Some called out for mercy,
 the small and the great shed tears,
 and some on the roof felt the water
 256 reach their feet.
 This one was shouting loudly, 'Mercy!'
 while he saw the river come down
 upon him,
 and he believed that he would drown
 260 that very night.
 I want to take you straight back to the
 river
 and how it destroyed the neighborhood
 where they made hats nearby
 264 Ponte Vecchio.
 That night Castle Altafronte fell;
 its salt storehouse became a fountain.

I've only recounted some of the pains
 268 but not those of Oltrarno
 and how the dangerous river Arno
 flooded Ripoli, and then Bisarno
 and how that area labored for
 272 a year in vain.
 And it leveled San Niccolò
 and it harshly wounded its inhabitants
 because none of their defenses
 276 remained solid.
 That river made the Bardi, who are
 so hot
 to earn money, flee like pimps,
 and it caused much harm to the Rossi
 280 and the Frescobaldi.
 I heard from someone who was there
 that it was so high and strong on Via
 Maggio
 that it did great damage to the wool
 sellers
 284 in the whole area.
 I will soon quit about making rhymes
 about the Oltrarno and return
 to the rest of the city – oh Jesus Christ,
 288 what pain and destruction!
 Ever since Florence was begun
 you cannot find anything written
 where it received another such wound
 292 so harsh:
 those who were wealthier lost more
 goods,
 and it left the small people destitute.
 By midnight the water had risen
 296 beyond all measure.
 Many people were certain they'd die
 if not that there was just then
 a breach in the wall alongside
 300 Prato.
 Since the river came back to its course,
 the water suddenly went down,
 and the day that was so hoped for
 304 was then upon us.
 I have recounted to you that painful
 Thursday,
 and the night that followed it,
 and now I'll tell you about
 308 the fateful Friday.

Oh Jesus Christ, king of heaven,
 this was such a mortal blow:
 for some lament for their fathers
 312 some for their brothers;
 some wept for sons, and some for
 daughters,
 and some wept over people, others
 wept over
 property that they used to have –
 316 this is great folly!
 And some scratched their faces out of
 anger,
 seeing what the water took from them,
 some people saw their grain, others
 their wine,
 320 destroyed.
 Some people said: ‘I thank Christ for this:
 He has given me the time
 for me to make my confession
 324 because I feared
 that I would die without penance;
 but now I have repented my failings.
 So may Divine Power be praised
 328 with joy!’
 Oh, this sadness was quite harsh,
 but truly it was justice that God
 demonstrated to punish the Florentines
 332 of their malice.
 Because they only think of making
 money
 and of making great demands of the
 farmers
 and of imposing taxes on their poorest
 336 citizens.
 At Vespers, the voice spread through
 the land
 as people often like to pass the news,
 that a soldier of the Priori had seen
 340 from the tower
 the Arno River growing stronger
 than what it had been before –
 some people believed it to be true
 344 and quickly ran off;
 Among the people, this news was treated
 as the truth – they didn’t question it –
 and like she-bears when they are hunted

348 they run away,
 so too people scattered, the great
 and the small, everyone weeping,
 and they all took to
 352 the mountains.
 This person wails for her father, that one
 his brother, this one laments her mother,
 and that one strikes his face for
 356 his misfortune,
 saying, ‘Alas! Oh me! I’ve lost him!’
 and he was so terrified that he
 would be tossed into a watery grave –
 360 What shall I do?’
 People fled with three children in
 their arms;
 and women gave birth in the mud
 for several nights, with no pillows
 364 beneath their heads.
 That night there was such a watery
 storm
 that it didn’t stop until the next day;
 in the church the Minorites performed
 368 a pious rite
 and they laid many honors upon the
 altar,
 praying to God on behalf of all us
 sinners,
 and they did penitence until they saw
 372 the first glimmers of daylight.
 [17 stanzas are missing here]
 373 And here let’s leave
 from the other bank of that villainous
 river;
 because of it, Legnaia labored in vain,
 and in Settimo it destroyed much of their
 grain,
 377 and then came to Signa.
 Many people drowned in that malicious
 water,
 and it flooded every land, house, and
 vineyard;
 then it went on to Montelupo and
 Capraia
 381 always growing.
 It bounded fiercely between those two
 hills,

and it hit many houses with mud –
 most of them were torn from their
 foundations
 385 and thrust to the ground.
 It waged war near Castellina
 around its hills, but not the town itself
 because it is too high, but the great river
 389 struck at its feet.
 The cruel river fed many people their
 fatal meal,
 and it caused much weeping around
 Castellina,
 and then it spread through the plains
 393 of Pontormo.
 I, who never rest from learning the truth,
 was told by an informed man from
 that area
 that all the bells were hammered, ringing
 out
 397 the alarm.
 The felonious river completely razed
 that rural town, which had been so
 lovely,
 and from within, it attacked one side
 401 of Empoli.
 It thrust down all those walls,
 and it subjects the houses to sack,
 and with its force it causes them to
 crash down
 405 broken.
 Then that flood sent more and more
 homes
 down to the earth in little time,
 and then it turned itself toward
 409 Santa Fiore.
 To Elsa, which typically loved the Arno
 greatly,
 it came with such a dark color,
 and it brought painful death to many
 people
 413 with its waves.
 When the river had passed Santa Gonda,

it flowed so greatly across the plains
 that it razed Fucecchio, and then,
 417 without delay,
 it went to Santa Croce none the weaker,
 and, turning, it passed through
 Castelfranco, ruining its left bank
 421 cutting it in half,
 If it hadn't been turned away,
 Pisa would have had the worst of it,
 and it would have lacked for laughter
 425 with harsh wailing.
 Oh Father, oh Son, oh Holy Spirit,
 how that flood destroyed every area,
 and how it doubled our fourfold pain
 429 from what I can tell.
 I want to turn your attention from
 the river, and back to the Florentines:
 when they behave badly, they do so by
 habit
 433 and not by choice.
 By now, God had castigated them
 for some
 but not for all that they deserved to be
 repaid;
 I don't need to tell you if they mended
 437 any of their ways!
 If I have recounted any lies herein,
 it wouldn't cause me any shame in my
 opinion,
 because I have never been to study
 441 in Bologna.
 Think, Florentines, of the harsh time,
 and don't make excuses for your greed;
 think about how every person leaves
 445 this world nude,
 and may no one say, "I will hide
 from it,"
 unless they want to go to the depths
 of hell.
 My sirventes is finished: and I answer
 449 To your honor."
 Amen amen

II. Antonio Pucci: From the *Centiloquio*

Capitolo that solely relates the great pestilence of the flood that harmed so many people in Florence that it would require a bigger book than this to spell out all that it made manifest

- Every time that I remember even
a thousandth of 1333, I feel such outrage
3 that I almost can't contain myself;
considering that if Florence feasted
and rejoiced in June and May,
6 as you were previously made aware,
it didn't last long, because after the
riches
of happiness, all the music and songs
9 came back as weeping and sorrow.
I tell you that on All Saints Day
morning
it began to rain ceaselessly
12 in the city and the lands surrounding it.
Never was such a change seen before
that, by going on night and day,
15 it moved many hearts to sadden and cry
The sky became so terrifying
with thunder and lightning
18 that no one slept out of fear.
The harsh weather began on Monday,
and Casentino, the Arezzo plain, and
Valdarno
21 tasted of the rivers, which were all so
harmful.
With the high Sieve emptying into
the Arno,
it came on with all its destruction
24 to Sansalvi, Ripoli, and Bisarno;
it broke fishing piers, mills, and fulling
mills,
and harmed multitudes of people and
livestock,
27 even before evening came, or the follow-
ing morning.
We learned about it with great
bitterness
and we forgot about all our wars
30 and everyone felt great concern;
some people fled out of the lands
with their whole families all together,
33 going to their neighbors in the highlands.
There was little difference between
night and day,
because everywhere was so dark,
36 and everyone cried out, "mercy!"
Outside our lands, the Arno grew
so much
that it cast to the ground strong gate
39 of Croce, where the weeping doubled
as they saw this great flood come
upon them;
and this was Wednesday night.
42 Then the water was so very high
that it broke the walls along the Arno
and continually rose against the walls
against
45 the walls of the Minorites for more than
a cubit.
So the friars fled to the roof
of the church right away, and they made
an altar
48 and, I don't doubt, they feared for their
lives.
There, with their devoted singing
they said the mass, with many candles
51 and their bells never stopped chiming.
The air was so dark and shadowy
that it impeded the vision of men and
women
54 there in spite of all the candles.
And now I remember how the water,
ever continuing to grow, near San
Giovanni
57 it came halfway up the columns;
the Arno never stopped roiling

and it partly destroyed Castle Altrafonte
 60 where they stored the salt, and this dis-
 pleased many.
 Only one bridge remained where there
 were four,
 because the horrible flood caused three
 to fall,
 63 and it was deeper than a *braccio* on Ru-
 baconte Bridge.
 As was made plain to many people,
 the houses where the art of helmet-
 making
 66 was done all collapsed – it was so
 powerful!
 Then fell the Statue of Mars
 where our ancestors made their devotion
 69 as if it were a god; it is now certified
 that it resided on Ponte Vecchio,
 but it was never seen there again.
 72 Then the Arno, demonstrating its
 strength,
 made tower fall along with the walls
 beside San Frediano, as I now relate,
 75 and then a great many of those by Prato.
 If that hadn't happened, this city
 would have been in great peril because
 78 the water was 6 *braccia* deep at some
 points.
 But since it opened up at that area
 the water in the city began to drop
 81 and the sky began to clear somewhat.
 Then the third night, I'll have
 you know,
 the city remained filled with mud
 84 as you can understand without me say-
 ing so.
 Take note: the people who had fled
 to the mountains that night rejoiced
 87 hearing that Florence was emptied of
 water.
 The city gates were never closed
 before the day broke because
 90 of all the returning men and women;
 and I was one of them who came back.
 After a few days had passed
 93 it was as if that event hadn't happened.
 But then there began a new lament

because there were some powerful
 people
 96 who brought about more destruction.
 Since they didn't remove their
 goods well
 they lost foodstuff and countless objects
 99 so that, once wealthy, they now were
 destitute.
 Think about how the poor must have
 fared
 when, even in good, prosperous times,
 102 they find so few who will help them!
 But God provided them some earnings
 when they dug through the wreckage left
 by the waters
 105 they found things bewailed by others.
 Because people who are used to a
 soft life
 couldn't put up with the hard work
 108 like those who had always labored.
 A gross estimate: the commune
 suffered
 damage costing 200,000 florins,
 111 and many people now know.
 The citizens who'd had many
 possessions
 because they had stockpiles of grain
 114 now didn't have enough for their own
 families.
 In the underlying areas of the plains
 Legnaia, Brozzi, Campi and Peretola
 117 and other towns sowed in vain;
 just as a poorly built house crumbles,
 so too did many town on the banks of
 the Arno,
 120 and I know this because I too am a hum-
 ble man.
 People ran from all parts, even Pisa,
 up to the mountains to survive,
 123 just as I'm chronicling for you.
 If it hadn't been for the great ditch
 Arnonico, which turned away the Arno,
 126 it would have torn down every wall
 in Pisa.
 Even still, laughter in Pisa was rare
 because what then came along
 129 flooded a great part of that city,

and it pierced many hearts with fear
 such that you would have seen the eyes
 132 of people of all ranks leaking.
 With its flow, it did such damage
 to persons and their houses there
 135 that it even reached San Piero in Grado,
 and very little of it could be helped;
 whoever was there, wailing aloud,
 138 struggled to escape and save themselves.
 At the mouth of the Arno it thrust out
 more than 300 bodies whose lives it took
 141 but the sea quickly pushed them back to
 the shore,
 with uprooted trees and destroyed
 vines,
 ruined seeds, and much cloth and wool –
 144 so much it can't be written out!
 It wasn't just the endpoint of that
 river,
 but all the rivers of Tuscany
 147 came out at that point.
 It also brought forth all the vermin
 that came down from the mountains
 150 where those animals breed, I believe.
 Nearby, in the lands of the Romagna
 it appears that the Tiber caused
 great harm
 153 in Castello, and in Borgo and their lands,
 in Perugia and Todi (and it flowed
 free of its banks in Romagna and
 Orvieto) –
 156 I continue – in Siena and in Maremma.
 Afterward, the Florentines
 couldn't find flour because all the mills
 159 were destroyed by the flood;
 lacking all dinners and lunches
 they were helped and assured by their
 neighbors
 162 who supported them with flour and
 bread.
 Prato and Pistoia began the “dance,”
 Colle and Poggibonsi were all helpful –
 165 they all shared their abundance with us.
 For this reason, in my opinion, it is
 right
 to remain friends with them always,

168 and never to forget what I'm telling
 you here.
 The Florentines, seeing the buildings
 beside the fishing piers and mills on the
 banks,
 171 had brought Florence to the precipice,
 they made the reforms that, to
 open up
 the course of the Arno, neither mill
 nor pier
 174 should be closer than 2000 *braccia* to
 Magnoli;
 nor should any building be
 constructed
 between the bridges nor beyond Carraia
 bridge,
 177 with a fine costing thousands of florins.
 But the ink wasn't even dry yet
 when the men who made that law
 180 tried to undermine it in front of
 everyone;
 for as our Dante said so well:
 on one day they pass laws with grand
 preambles,
 183 and on the next day they are all undone.
 Astrologers and natural philosophers,
 and men knowledgeable in Scripture, the
 religious,
 186 and master theologians debated the
 question
 if this happened in the natural course
 of events,
 as happenstance, or by Divine
 judgment,
 189 and what were the causes of this
 calamity?
 Many people said there were
 indications
 of the conjunction of some planets,
 192 which brought about this result.
 One wise and humble master –
 a member of the Franciscans – said in a
 sermon
 195 that any other cause can be impeded in
 its effects

- except for the one that can never be
impeded,
namely God's will, which gives and
takes away
198 at His pleasure, so too it can wound
or heal;
this event was as God willed it,
and there is no recourse against His will.
201 And he cited other examples and ex-
plained them.
But, reader, not wanting to bore you,
I'll leave them out, because listing
them here,
204 would make you say, "he's working
against me!"
So now, I'll say what the author said
about the previous adversities that
207 the City of the Flower had faced –
I won't hold back from recounting
some of them!
First, the divisiveness that still exists
210 between the Guelphs and the Ghibellines,
with harshness;
then the factions of Black and White
that hewed down the greater love for
Florence
213 such that the city became exhausted
by it.
Then King Charles arranged things
to drive out the Whites and to give the
game over
216 to the Blacks, which I don't want to re-
peat here.
Then, in 1304, the cruel fire;
in 1312, the war with the Empire
219 that harmed us a lot but harmed it not
at all;
since Henry still desired much,
he died on the road in 1313
222 as we needed to relate elsewhere.
Then, our borders brought
such great mortality to Florence:
225 then the defeat at Montecatini.
It's a marvel that anyone still draws
breath!
Because it took up the war banners
again,
- 228 and the city didn't seem to be any
weaker.
Soon thereafter, we lost at Altopascio,
then such great famine and starvation in
the city
231 that, as soon as I write it, I grow pale!
Florence should be smaller than
Matelica
for all that it's suffered, but
234 it's been lifted up by angelic grace.
Little time passed between one thing
and the next –
it spent florins like so many poppy seeds
237 that it would take to look to tell it all.
Then, as I said, the Bavarian op-
posed us,
and our pains and anguish only grew;
240 but then he departed like a ghost.
Soon after, King Giovanni opposed us;
then came the flood. Whence the
sentence
243 of the author who speaks without
deception:
all those ills put together into one
wouldn't equal, in my opinion,
246 what the great plague brought to us.
But, along with the others, this one
shouldn't be thought of as an injury,
249 but due to how we offend God
by living in lust and adultery,
by harming our neighbors all the time
252 with all madness and dishonest manner.
And if there hadn't been good people
among us,
I believe that the High Glorious King
255 would have struck us with an even
worse rod.
When our adversity was brought
to the attention of King Robert,
258 he wept greatly over such news.
Out of pity, he wrote a letter
to the men of the Priory
261 with teachings of the saints and other
authorities.
It contained three parts, as I re-
late here:
in one: that we should endure with peace

264 the events of the savage Arno;
 in the second, which I like greatly,
 that we should correct our sins
 267 and make amends for our past failings;
 the third was that we should take
 comfort
 from him, because he would not fail us
 270 in whatever we might ask of him.
 The Legate of Bologna didn't do that
 but instead he was giddy, and he said:
 273 “They defeated me near Ferrara” (he
 wasn't lying!).
 After the deluge, certain mag-
 nates said:
 “We can defeat the *Popolo* and cut the
 bridge
 276 so that they – from over there – can't at-
 tack us!”
 Then a Rossi wounded one of the
 Magli
 who, if I understand correctly, was one
 of the *popolani*:
 279 anticipating troubles, the people all
 armed themselves.
 But then the magnates saw this,
 they didn't follow through on their evil
 plans
 281 and instead they wisely remedied the
 situation.

So the one who did the wounding was
 condemned,
 as was needed to maintain order,
 285 and the *popolani* remained in power.
 I don't know if you, reader, remember,
 like I do, how some people, crossing the
 river
 288 in a boat capsized in short order?
 Fifteen people drowned in the time to
 say a “Hail Mary!”,
 others survived though the grace of the
 Highest
 291 but not without terror and great effort.
 because the Arno was still swollen;
 they were helped by the people nearby
 294 so that they were spared from the worst
 even though they gulped more than
 100 mouthfuls.
 Then, wooden bridges were ordered
 297 but they ended their service in lit-
 tle time;
 the stronger and bigger were built
 as they are today, and I don't think
 they can ever fail, as they have solid
 foundations.
 301 And I have said enough about the
 flood.

Chiara Benati

The Environmental Causes of the Plague and their Terminology in the German *Pestbücher* of the Fourteenth and Fifteenth Centuries

Abstract: In his treatise on the treatment of the plague (*Liber pestilentialis de venenis epidimie. Das büch der vergift der pestilenz das da genant ist der gemein sterbent der Trüsen Blatren*, Strassburg: Grüninger 1500), the Strassburg surgeon Hieronymus Brunschwig lists a series of possible causes for the outbreak of the plague, some of which clearly remind us of the present-day environmental discourse on pollution and climatic change: the poisoning of the soil, the air, and the water determined by the negative influence of the stars, and the appearance of unusual climatic conditions, as well as sudden and significant weather changes. These concepts are not Brunschwig's own but derive from a long tradition of German and many other texts dealing with the plague, its causes and treatment (*Pestbücher*), and they can be specifically traced back to the work of previous authors, such as for example Konrad of Megenberg (1309–1374), one of the more forward-thinking authors in this field. In this study, some of the most significant of these treatises from the fourteenth and the fifteenth centuries will be taken into consideration with respect to their description of the “environmental” causes of the plague and to the terminology used to indicate them, in order to outline the late medieval and early modern conception of the relationship between human health and environment, as well as its linguistic representation in the German language.

Keywords: plague, environmental causes, *Pestbücher*, medical terminology

Introduction

As underlined by Sabine Krüger, when in 1347 some Italian merchant ships returning from the Black Sea brought the plague to Europe, the memory of the last pestilence (The Justinian Plague, 541–549 C.E.) had almost faded on that conti-

ment.¹ As a result of this lack of familiarity with this almost completely unknown disease killing human beings and animals, theories on its causes flourished.² These theories can be grouped into five categories ascribing the plague to: 1. the influence of the stars; 2. the effects of a form of environmental pollution, mainly of the air, called miasma; 3. contagion; 4. a manufactured poison;³ and 5. divine wrath and punishment for the sins of humankind.⁴

None of these theories was completely new, since they can all be traced back to the lines laid down by Avicenna and to the distinction between two main causes of the plague, a remote one arising from the heavens or celestial bodies and a near one originating on the earth.⁵ During the Black Death which began to emerge in western Europe in the late 1340s this distinction became part of the standard explanation of the plague and was theorized by a number of medical authorities, such as the faculty of medicine at the University of Paris, the Italian Gentile da Foligno († 1348), the Catalan Jacme d'Agramont († 1350), and the Spanish-Arabic physician Ibn Khātima (ca. 1324–1369).⁶

Among these, Parisian professors favored the celestial cause thinking that a universal pandemic of diseases required a universal explanation and declared

1 Sabine Krüger, "Krise der Zeit als Ursache der Pest? Der Traktat De mortalitate in Alamannia des Konrad von Megenberg," *Festschrift für Hermann Heimpel. Zum 70. Geburtstag am 19. September 1971*, vol. 2, ed. Die Mitarbeiter des Max-Planck-Instituts für Geschichte. Veröffentlichungen des Max-Planck-Instituts für Geschichte, 36.II (Göttingen: Vandenhoeck & Ruprecht, 1972), 839–83; here 839.

2 On this, see also John Aberth, *An Environmental History of the Middle Ages: The Crucible of Nature* (London and New York: Routledge, 2013), 52.

3 This idea was, in the late Middle Ages, connected with the belief that minority groups as lepers and Jews were conspiring to poison drinking wells in order to subvert the exiting social order. The emergence of this prejudice, its development, growing popularity, and consequences in terms of persecution and violence toward those minorities are analyzed in Tzafrir Barzilay, *Poisoned Wells: Accusations, Persecutions, and Minorities in Medieval Europe 1321–1422*. The Middle Ages Series (Philadelphia, PA: University of Pennsylvania Press, 2022).

4 On this, see also Krüger "Krise der Zeit als Ursache" (see note 1), 840.

5 On this, see also Jon Arrizabalaga, "Facing the Black Death: Perceptions and Reactions of University Medical Practitioners," *Practical Medicine from Salerno to the Black Death*, ed. Luis García-Ballester, Roge French, Jon Arrizabalaga, and Andrew Cunningham (Cambridge: Cambridge University Press, 1994), 237–88; here 251–56; Lori Jones, "'Turkey is Almost a Perpetual Seminary of the Plague': Relocating Pathogenic Plague Environments," *Disease and the Environment in the Medieval and Early Modern Worlds*, ed. Lori Jones. Themes in Environmental History, 2 (London and New York: Routledge, 2022), 67–90; here 73–74.

6 On this, see also Luisa Maria Arvide Cambra, "The Causes of the Black Death Described by Ibn Khātima in the Work Taḥṣīl al-garaḍ," *Annals of Reviews and Research* 4.1 (2018): 555–626; and William B. Ober and Nabil Alloush, "The Plague at Granada, 1348–1349: Ibn al-Khatib and Ideas of Contagion," *Bulletin of the New York Academy of Medicine* 58 (1982): 418–24; here 421.

that the plague was caused by the lining up of the planets Saturn, Jupiter, and Mars at 1:00 p.m. on March 20th, 1345.⁷ This very conjunction was considered the ultimate cause of more earthly sources of the plague. The lining up of these planets, in fact, drew up some evil vapors from both water and earth which mixed with the air corrupting it and rendering it harmful and hostile to human nature.

The corruption of the air is central in Jacme d'Agramont's definition of pestilence which, going back to Galen, is described as a "contra-natural" change in either the qualities of air (alteration) or its substance (putrefaction).⁸ The distinction between a partial and a total corruption of the air, which – in the latter case – is changed into miasma, is also present in the works by Ibn Khātima, who agrees with Gentile da Foligno in believing that the air we breathe every day is never pure, but rather a mixture containing watery and earthly vapors which can always putrefy.⁹

Air could be corrupted also by physically nearby causes such as rotting cadavers in cemeteries and on battlefields, stagnant water, dung, rotting plants and animals, the release of vapors originally enclosed in caverns through earthquakes, etc. All these elements could, in fact, give rise to bad vapors which could be carried from place to place by the wind.¹⁰

7 This statement, which is strongly indebted to the French Jewish astrologer Levi ben Gerson, was repeated by later physicians until the fifteenth century. On this, see Bernhard R. Goldstein and David Pingree, "Levi ben Gerson's Prognostication for the Conjunction of 1345," *Transactions of the American Philosophical Society* 80.6 (1990): 1–60. An example of the survival of this statement can be found in the anonymous early-fifteenth-century Latin text from the southern part of Germany preserved in Gdańsk, PAN, Biblioteka Gdańska, Ms 2312 which was edited in Karl Sudhoff, "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. XII. Ausarbeitungen über die Pest vor der Mitte des 15. Jahrhunderts, entstanden im niederen Deutschland. (Fortsetzung)," *Archiv für Geschichte der Medizin* 11.3–4 (1919): 121–76, where we read: "Dicamus ergo, quod remota causa huius pestilentie fuit aliqua constellacio celestis. anno 1345 fuit maxima coniunctio trium superiorum planetarum, quod est dimittendum astrologis" (We can affirm that the remote cause of this pestilence was some celestial constellation. In 1345 there was a great conjunction of three planets, which should be left to astrologists). See also Aberth, *An Environmental History* (see note 2), 243.

8 Jacme d'Agramont, "Regiment de Preservacio a Epidimia o Pestilencia e Mortadats. Epistola de Maestre Jacme d'Agramont als honrats e discrets seynnors pahers e conseyll de la Ciutat de leyda 1348. Regiment of Protection Against Epidemics or Pestilence and Mortality," trans. Marie-Louise Duran-Reynals and Charles-Edward Amory Winslow, *Bulletin of the History of Medicine* 23 (1949): 57–89; here 61–63.

9 See also Taha Dinanah, "Die Schrift von Abi G'far Ahmed ibn 'Ali ibn Mohammed ibn 'Ali ibn Hatimah aus Almeriah über die Pest," *Archiv für Geschichte der Medizin* 19 (1927): 27–81; here 36; Gentile da Foligno, *Consilium contra Pestilentiam* (1473; Colle di Valdelsa: [Bonus Gallus,] 1479), 33.

10 See also Aberth, *An Environmental History* (see note 2), 54–55.

The debate over the causes of the plague and over the prominence of one category or the other (remote or nearby cause) went on during the entire late Middle Ages as plague doctors continued to champion for either higher or lower explanations of the pestilence. In this study, I will try to outline the most common opinions on the nearby – environmental – causes of the plague in fourteenth and fifteenth-century Germany taking into consideration a corpus of both Latin and vernacular works on the topic. After presenting and contrasting them, I will focus on the texts in the German language and on the terminology that they use to refer to these environmental causes of the disease in order to single out the linguistic representation of the late medieval and early modern conception of the relationship between human health and environment in the vernacular.

Focusing on the explanations of the plague provided in German medical sources from the fourteenth and fifteenth centuries, this essay approaches nature from a mainly anthropocentric hygienic perspective aimed at portraying the late medieval and early modern perception of the connection between the environment in which human beings live and their state of health. The term “environment” is used here to indicate the subset of nature encompassing the complex of physical, chemical, and biotic factors constituting the conditions and surroundings that affect living organisms. The causes of the pestilence described in the texts analyzed in this work are not only connected with natural elements and processes (e.g., earthquakes and anomalous climatic conditions), but also with anthropogenic factors influencing the quality of the air, water, and soil (e.g., the presence of unburied corpses on a battlefield).

Theories on the Environmental Causes of the Plague

Particular attention to those which can be regarded as environmental explanations for the plague is paid in the works of authors taking into consideration the near causes of the pandemic. Among these, one of the most forward-thinking and influential figures was the Bavarian Konrad of Megenberg (1309–1374)¹¹ who, in 1350, devoted to the causes of the plague a Latin treatise, *Tractatus de mortalitate*

¹¹ On the academic career of Konrad of Megenberg and his works, see also Georg Steer, “Konrad von Megenberg,” *Die deutsche Literatur des Mittelalters: Verfasserlexikon*. Vol. 5: Kochberger, Johannes – >Marien-ABC<, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1985), 221–36, and Dagmar Gottschall, “Konrad of Megenberg and the Causes of the Plague: A Latin Treatise on the Black Death Composed ca. 1350 for the Papal Court in Avignon,” *La vie culturelle, intel-*

in *Alamannia* also known as *De epidimia magna*.¹² In this short exposition, Konrad does not present any new explanation, but focuses on the existing miasma theory emphasizing the role of earthquakes in the development of epidemics. The two most common remote explanations of the pestilence – the divine punishment for the sins of humankind and the negative influence of the stars – are categorically rejected by Konrad because, on the one hand, no positive effect on human morality can be ascribed to the plague and, on the other, no harmful planet conjunction would ever last as long as the pestilence did.¹³ After ruling out celestial causes, Konrad's reasoning moves to comment upon the terrestrial ones and ascribes the outbreak of the pestilence to a corrupted and poisonous exhalation from the earth ("exalacio terrestris corrupta et venenose"):

si ex naturali cursu facta est mortalitas sepe dicta, tunc eius causa per se et immediata est exalacio terrestris corrupta et venenosa, que aera in diversis mundi partibus infecit et inspirata hominibus ipsos suffocavit subita quadam extinctione.¹⁴

[If the above-mentioned pestilence has a natural cause, then its immediate cause is the corrupted and poisonous terrestrial exhalation, which has infected the air in many parts of the world and which, if inhaled by men, suffocates them causing their immediate death.]

Differently from the Paris masters, Konrad does not indicate a planet conjunction as cause of these harmful exhalations, but rather the great earthquake of Villach in Carinthia which in January 1348 set free the vapors which had been enclosed in the bowls of the earth for a long time and, consequently had been transformed in a long process of putrefaction.¹⁵ This process, which in the Latin tract is ex-

lectuelle et scientifique a la cour des papes d'Avignon, ed. Jacqueline Hamesse. Textes et études du Moyen Âge, 28 (Turnhout: Brepols, 2006), 319–32.

¹² The treatise is transmitted integrally in a single manuscript (Cod. 15, fol. 106r–115r) from the Collegiate of Maria Saal in Carinthia. On this, see also Hermann Menhardt, *Handschriftenverzeichnis der Kärntner Bibliotheken*. Vol. 1: *Klagenfurt, Maria Saal, Friesach* (Vienna: Druck und Verlag der österreichischen Staatsdruckerei, 1927), 272. Apart from this manuscript, which was used as a basis for the edition in Krüger, "Krise der Zeit als Ursache" (see note 1), 862–83, an anonymous extract from the treatise is preserved in Erfurt, Universitätsbibliothek, Cod. Ampl. 4° 230, fol. 146r–148r. This version has been edited in Karl Sudhoff, "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. XI. Ausarbeitungen über die Pest vor der Mitte des 15. Jahrhunderts entstanden im niederen Deutschland," *Archiv für Geschichte der Medizin* 11.1/2 (1918): 44–92; here 44–51.

¹³ See also Gottschall, "Conrad of Megenberg and the Causes" (see note 11), 323.

¹⁴ Krüger "Krise der Zeit als Ursache" (see note 1), 877.

¹⁵ Krüger "Krise der Zeit als Ursache" (see note 1), 878: "Tunc dico, quod maximus vapor et aer corruptus, qui egressus est in terre motu pregrandi, videlicet qui accidit anno domini MCCCXLVII (!) in die conversionis sancti Pauli, et similiter aer corruptus in clausuris terre, qui postea in aliis

plained quite synthetically, is described in a more detailed way – in vernacular – in Konrad’s *Buch der Natur* (1348–1350).¹⁶ In the thirty-third chapter of the second book dedicated to earthquakes (“Von dem ertpidem”), in fact, the German author lists the signs indicating a seism and includes among them a lethal corruption of the air:

Daz dritt zaichen ist, daz der luft vor vnd nach so gar vergift wirt, daz vil laüt da von sterbent. Wann so der erdisch dunst lang gestet in der erden beslozen, so faült er an im selber vnd wirt gar vergiftik. Daz brüf wir an den verworffenen tieffen prunnen, die lang verworfen sint gewesen. Wenn man die vegen wil und sie wider auf wirft, so sterbent oft die ersten veger, die dar ein climment. Daz ist oft geschehen. Wir brüfen auch daz an den berchknappen, die in die grüb varnt, die werdent etzweivil wirbik in irm haupt, also daz sie gern vehtent sam die trunchen laüt, vnd ist doch der selb dunst niht lang stend an ainr stat beslozen in der erden, wan die grüb sint offen.

Von der warhait geschahen grozzev dinch von dem ertpidem in Chårnden ze der stat Villach, do man zalt von Cristi gepurt drivzehenhundert iar, dar nach in dem aht und vierzigstem iar, an sant Pauls tag, als er bechert wart. Wan gar vil laüt verdurben in der vorgeannten stat, vnd vielen div münster nider und die häuser und etzwa ain perg auf den andern. Wan der ertpidem waz vmb vesperzeit vnd waz so starch und so grozz, daz er sich raicht unz vber die Tûnawe in Merhern vnd auf in Baiern vntz vber Regenspurch und wert mer dann vierzig tack, also daz nach dem ersten ie ain clainr chom dar nach vber etzweivil tag oder wochen.¹⁷

[The third sign is that before and after an earthquake the air is so poisoned that many people die because of it. When the terrestrial vapor remains long enclosed in the earth, it putrefies by itself and becomes extremely poisonous. We see that in the deep covered wells which have been covered for long time: when they are opened because they need to be cleaned, the first cleaners entering them die. This happens often. We see that with the miners who enter the pits: they become very dizzy in the head, so that they fight like drunk people, and this even though this vapor has not remained long enclosed in one spot in the earth because the pits are open. As a matter of fact, the earthquake in the city of Villach in Carinthia on the day of the conversion of Saint Paul in 1348 had terrible consequences:

motibus et elevationibus terre egressus est, aerem super terram infecit et homines in diversis mundi partibus interfecit” (For this reason, I affirm that the great vapor and the corrupted air which were set free in the great earthquake that took place in 1347 (!) on the day of the conversion of Saint Paul (January 25th) and, similarly, the corrupted air from the bowls of the earth which were set free in other earthquakes have infected the air on the earth and killed men in many parts of the world).

¹⁶ On the text and its manuscript tradition, see also Steer, “Konrad von Megenberg” (see note 11), 231–34.

¹⁷ Konrad von Megenberg, *Buch der Natur*, ed. Robert Luff and Georg Steer. Vol. 2: *Kritischer Text nach den Handschriften*. Texte und Textgeschichte, 54 (Berlin and Boston: Walter de Gruyter, 2003), 133.

many people died in the above-mentioned city, churches and houses collapsed and a mountain fell onto another. The earthquake took place at eventide and was so strong that it was perceived on the other side of the Donau in Moravia and in Regensburg in Bavaria for over forty days, with smaller earthquakes coming after the first one for days and weeks.]

The same description of the correlation between earthquakes and pestilences can be found in another, unedited, German piece of Konrad's transmitted in *codex unicus* in Munich, Bayerische Staatsbibliothek, clm 903 (fifteenth century), fol. 10r–12r under the Latin title *Causa terre motus*. This text, which follows a series of German annotations on earthquakes and other events that took place between 1348 and 1356 in the regions of Carinthia, Bavaria, and Hungary, almost perfectly corresponds to the chapter in the *Buch der Natur*, but comes to an end after listing the three most common opinions on the origin of the disease (star conjunction, divine punishment or deliberate well poisoning by the Jews). While doing this, the author refers to “another book still in the making,” where he has written more on the topic:

Von disen dingen han ich mer geschriben in ainem puch daz ligt noch in der wigen / der red ist hie genug zu einer churzweil / Got sey mit eu mein lieber frewnt.¹⁸

[I have written more on this in a book which is still in the making. This is enough for a conversation. God be with you, my dear friend.]

If, on the one hand, Konrad's explanation of earthquakes is generally in line with contemporary natural philosophy¹⁹ and particularly indebted to Thomas of Cantimpré's *Liber de Natura Rerum*, on the other, a largest part of the chapter is clearly based on the German author's own experience and knowledge. In both the Latin tract on the causes of the plague and the chapter of the *Buch der Natur* on earthquakes, in fact, he includes references to actual, local seismic events he

¹⁸ See also *Andreas von Regensburg sämtliche Werke*, ed. Georg Leidinger. Quellen und Erörterungen zur bayerischen und deutschen Geschichte. Neue Folge, 1 (Munich: M. Rieger'sche Universitäts-Buchhandlung, 1903), LXVII–LXVIII, which suggests that the annotations on earthquakes preceding these passages could be also part of Konrad's material given both their content and their provenance from Regensburg.

¹⁹ The possible connection between pestilence and earthquakes is also hinted at in Albertus Magnus, who, however, does not explain its mechanism in detail. *Sancti doctoris Ecclesiae Alberti Magni Ordinis Fratrum Praedicatorum Episcopi Opera omnia ad fidem codicum manuscriptorum edenda apparatu critico notis prolegomenis indicibus instruenda curavit institutum Alberti Magni coloniense Ludgero Honnefelder praeside*. Vol. 1.4: *Meteora*, ed. Paulus Hossfeld (Münster: Aschendorff, 2003), 141: “Scias etiam quod frequenter pestilentia et praecipue omnem sequitur terrae-motum” (Be aware that a pestilence often follows every earthquake). See also Gottschall, “Conrad of Megenberg and the Causes” (see note 11), 329.

had either experienced himself or heard first-hand from direct witnesses. In this combination of real observations and, possibly, personal experiences we find one of the most modern aspects of Konrad's work.

Another German author mentioning earthquakes in his description of the causes of the plague is a certain Master Bernhard of Frankfurt who allegedly wrote a Latin casebook during the outbreak of the disease of March 1381.²⁰ In the initial part of this text, which is transmitted – after the plague tracts of Gentile da Foligno and Giovanni della Penna from Naples – in Leipzig, Universitätsbibliothek, Ms. 1178, fol. 57r–60v under the title *Consilium magistri bernhardi de Franckfort contra pestem*, the causes of the disease are discussed along with the signs possibly anticipating its outbreak:

Et in summa quantum ad causas supponit ex quodam suo libro, quem de natura composuit, quod quatuor universales fluxus universaliter intrant sub terra et exeunt in invisibilibus locis orientis, occidentis, meridiei et septentrionis, qui per motum fluxus et refluxus motum causant in subterraneis, propellendo aerem et viceverso exeuntem aquam aere, unde totus inferioris naturae evenit motus et superflue aqua intrante infrigidabitur et humectabitur actio inferiorum. Cum vero debite irrigatur, debite dissolvitur et componitur natura, modo secundum celi, cum saturnus opponitur signo celi . . . et mare in opposito signo celi . . . ab utraque parte confluunt aquae tam orientaliter quam occidentaliter et aer per rivos terrae compellitur ad exeundum et terra patitur motum et rupturas et omnes aquae collaterales, particulares et universales una cum aere incluso in subterraneis terrae centri patiuntur violentiam et totius motus inferioris naturae conturbant.

Surgunt venti primo universales et ventorum turbines opposite flantes, scilicet septentrio versus meridiem et meridies versus septentrionem. Et istud est primum signum universalis futurae pestilentiae. Post hoc orienter contingunt terrae motus, post hoc nebulae universales et tempora nebulosa, post hoc fulmina et tonitrua magna post particularia et alia signa. Et primo in quinto anno incipit pestilentia.²¹

[As far as the causes are concerned, he assumes, on the basis of the book on the nature which he wrote, that four universal fluxes enter everywhere under the ground and issue forth from invisible places in the East, West, South, and North. They ebb and flow underground, propelling the air and, in the other direction, the water escaping from the air. A movement of all the inferior nature takes place and the superfluous water penetrates into the lower regions cooling and moistening them. If there is adequate irrigation, these fluxes

²⁰ All attempts of identifying this character, who seems to have been trained in Italy, have been vain, since no physician named Bernhard is present in the acts of the city of Frankfurt in the fourteenth century, nor can he be traced in Trier, where he could have been active later. On this, see Karl Sudhoff, "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. VIII. Pestregimina aus dem westlichen Deutschland bis zur Mitte des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 8.4 (1915): 236–89; here 244.

²¹ Sudhoff, "Pestschriften VIII" (see note 20), 244–45.

are adequately dissolved and stored according to the stars. When Saturn is in opposition and the sea is in the opposite sign, water flow from both sides, from the East and from the West and the air is forced to exit through the brooks of the earth and the earth suffers movements and fractures and all collateral, particular, and universal water together with the air enclosed underground at the center of the earth are violently shaken and confound the regular movement of the inferior nature.

First winds are generated everywhere and whirlwinds that blow in the opposite direction, that is from North southward and from South northward. And this is the first universal sign of a future pestilence. After that earthquakes happen in the East, then everywhere there are vapors and cloudy periods, then lightning and great thunderstorms, then other particular signs. And the pestilence begins within five years.]

The connection between these fluxes penetrating the earth and the insurgence of the disease is then explained in detail. The water penetrating the ground is contaminated by all the noxious substances which are present there, becomes thick and remains in the bowls of the earth, where it putrefies. The movement of the air underground then brings to the surface the poisonous substances contained in the earth ("venenum terrae"). These are excessively cold substances that harmfully chill with their exhalations any living creature:

Ex illo ergo vapore attracto per anhelitum dicit multiplicari in corporibus humanis humorem frigidum et humidum putridum in venis lateralibus habentibus capita sua sub asellis aut in lumbis, ad quas venas confluant venae capitis et venae corporis. Ex tali humore dicit causari febrem illam pestilentialem hoc modo.²²

[When this vapor is inhaled, it multiplies the cold and moist putrid humor in the human body concentrating it in the peripheral veins, which have their beginning in the armpits or in the loins and with which the veins of the head and the body merge. The fever of the plague is said to be caused by this vapor in this way.]

Differently from Konrad's explanation which ascribed the insurgence of the pestilence to the corruption of the air due to the exhalations from the earth set free during earthquakes, Master Bernhard describes a more complex chain reaction, in which the poisoning of the air is the result of the putrefaction of the water penetrated underground. Moreover, the Latin text also attempts at drawing a connection between the miasma and the humoral theory: the excessive presence of cold and humid humors in the body causes the disease.²³

²² Sudhoff, "Pestschriften VIII" (see note 20), 246.

²³ This is, however, in contrast with what is usually indicated as the condition determining the plague: an excess of moist-warm blood. On this, see also Klaus Bergdolt, *Der Schwarze Tod in Europa: Die große Pest und das Ende des Mittelalters* (Munich: Verlag C. H. Beck, 1994), 21.

A reference to the imbalance of the humors generated by the miasma can also be found in the Latin text in Wolfenbüttel, Herzog August Bibliothek, Cod. 18.18 Aug. 4°, fol. 64r–70v (fifteenth century) ascribed to a certain Master Petrus of Cottbus.²⁴ In this case, however, the pathogenic corruption of air does not come exclusively from the depths of the earth, but also from its surface, where rotting cadavers, stagnating water in ponds and lakes can contaminate it as well as water:

A radice inferiori nomine quandoque solum et est vniversalis et magna, ut ex cadaueribus mortuorum post bellum uel ex corruptione stagnorum et lacuum uel ex corruptione aeris et aque et ex commixtione vaporum terrestrum corruptum, qui faciunt nocere aerem . . .²⁵

[The lower cause, which is only by name such, is great and universal, as from the cadavers of the dead after a war, or from the corruption of ponds and lakes, or from the corruption of air and water and from the contamination with corrupted earthly vapors which make the air noxious.]

Moreover, the negative effects of air, water and soil contamination on the human body are not exclusively connected with the inhalation of the vapors they exhale, but also with the ingestion of food grown in a poisoned environment which, in turn, becomes poisonous.²⁶

A hierarchy of the causes of the plague is established in the *Compendium de Epydemia* by Johannes of Saxony²⁷ which is transmitted in the manuscript Gotha, Forschungsbibliothek der Universität Erfurt, Cod. Chart. A. 501, fol. 273r–280r (middle of the fifteenth century). Here it is stated that God is a very remote cause followed, in descending order of nearer causes, by the heavens, the air, the humors, putrid air (“aer putridus”), and putrid vapor infused in the heart (“vapor pu-

24 Sudhoff, “Pestschriften XII” (see note 7), 121–32. On the manuscript, see Otto von Heinemann, *Die Augusteischen Handschriften*. Vol 4: *Codex Guelferbytanus 77.4 Aug 2° bis 34 Augusteus 4°* (Frankfurt a. M.: Vittorio Klostermann, 1966), 248–49.

25 Sudhoff, “Pestschriften XII” (see note 7), 124.

26 See Sudhoff, “Pestschriften XII” (see note 7), 124: “quare tempore epydemiali segestes et blada, pisces et uegetabilia, a quibus homines nutriri debeant, corrumpuntur” (Because during an epidemic the crops, grains, fish and vegetables from which men get nourishment, become corrupted).

27 On this physician who might have studied in Montpellier and practiced in Straßburg, where he is mentioned in the city charts of 1409, see also Karl Sudhoff, “Pestschriften aus den ersten 150 Jahren nach der Epidemie des ‘schwarzen Todes’ 1348. XVI. Pesttraktate aus Südwestdeutschland und der Schweiz,” *Archiv für Geschichte der Medizin* 16.1 (1924): 1–69; here 20–21; and Martha Goldberg, *Das Armen- und Krankenwesen des mittelalterlichen Straßburg* (Straßburg: Heitz, 1909), 92.

tridus in corde infusus").²⁸ Among these, the most important are those taking place either within the human body or in its immediate surroundings, whereas the most remote ones are only relevant because they set in motion the former. This thesis is, according to Johannes, demonstrated by the fact that the pestilence may assume different forms and have various symptoms, which excludes an immediate dependence from a universal force as God's: if the disease had a divine origin, in fact, it would manifest homogeneously in every patient everywhere.²⁹

Vernacular Sources on the Causes of the Plague: Establishing a Corpus

The ultimate aim of this study is to analyze the German plague tracts of the fourteenth and fifteenth century with respect to their depiction of those which we can describe as the "environmental" causes of the pestilence. This requires, first of all, the identification of a corpus of vernacular texts dealing with the theme, that is, of treatises transcending the mere practicality which is usually associated with medieval and early modern vernacular medical writing and its genres. Though less frequent than prescriptions, recipes for the preparation of preventative or therapeutic remedies, regimina, indications on how and where to perform bloodletting on infected patients, and prayers, larger, exhaustive works aimed at encompassing both theoretical and practical knowledge on the plague in the German language do exist both in manuscript and in print, as an attentive scrutiny of the sources inserted in Karl Sudhoff's collection of texts on the plague from the first 150 years after the Black Death of 1348 has demonstrated.³⁰

²⁸ Sudhoff, "Pestschriften XVI" (see note 27), 22.

²⁹ See also Aberth, *An Environmental History* (see note 2), 59–60.

³⁰ Karl Sudhoff, "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. I.," *Archiv für Geschichte der Medizin* 4.3 (1910): 191–223; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. II.," *Archiv für Geschichte der Medizin* 4.6 (1911): 389–424; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. III. Aus Niederdeutschland, Frankreich und England," *Archiv für Geschichte der Medizin* 5.2 (1911): 36–87; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. IV. Italienische des 14. Jahrhunderts," *Archiv für Geschichte der Medizin* 5.4/5 (1911): 332–96; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. V. Aus Italien (Fortsetzung) und Wien" *Archiv für Geschichte der Medizin* 6.5 (1913): 313–79; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. VI. Prager Pesttraktate aus dem 14. und dem Anfange des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 7.2 (1913): 57–114; id., "Pestschriften aus den ersten 150

The German texts explicitly reflecting on the etiology of the pestilence from the period between 1348 and the end of the fifteenth century which can, therefore, be considered as sources for the terminology describing environmental causes of the diseases include, in chronological order:

1. The plague regimen of three Strassburg masters, also known as *Schatz der wijsheit vnd der kunst verborgenlich* (ca. 1360);
2. Jakob Engelin's plague tract *Also das ein mensch zeichen gewun* (ca. 1400);
3. Hans Wirker's plague regimen *Ain Regiment sich zû behieten vor der uergiftigenn vnraiden bösen Pestilentz* (1450);
4. Heinrich Steinhöwel's *Büchlein der Ordnung der Pestilentz* (1472);
5. Hieronymus Brunschwig's *Liber pestilentialis* (1500).

Apart from these works, other vernacular texts on the plague refer to the environmental causes of the disease, though not discussing them in detail, e.g., providing indications on how to prevent infection, and can help us understand their linguistic representation in the late medieval and early modern German language.

Jahren nach der Epidemie des 'schwarzen Todes' 1348. VII. Pesttraktate aus dem südlichen Deutschland bis zur Mitte des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 8.2/3 (1914): 175–215; id., "Pestschriften VIII" (see note 20); id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. IX. Pesttraktate aus Böhmen, Schlesien und Nachbarbezirken bis zur Mitte des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 9.1/2 (1915): 53–78; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. X. Pesttraktate aus Böhmen, Schlesien und Nachbarbezirken bis zur Mitte des 15. Jahrhunderts (Fortsetzung)," *Archiv für Geschichte der Medizin* 9.3 (1916): 117–67; id., "Pestschriften XI" (see note 12); id., "Pestschriften XII" (see note 7); id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. XIII. Ausarbeitungen über die Pest nach der Mitte des 15. Jahrhunderts aus Nieder- und Mitteldeutschland," *Archiv für Geschichte der Medizin* 14.1/2 (1922): 1–25; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. XIV. Pesttraktate aus Süddeutschland in der 2. Hälfte des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 14.3/4 (1923): 79–105; id., "Pestschriften aus den ersten 150 Jahren nach der Epidemie des 'schwarzen Todes' 1348. XV. Pesttraktate aus dem östlichen Süddeutschland, Böhmen und Österreich in der 2. Hälfte des 15. Jahrhunderts," *Archiv für Geschichte der Medizin* 14.3/4 (1923): 129–68; id., "Pestschriften XVI" (see note 27).

Vernacular Sources on the Causes of the Plague and Their Terminology

The Plague Regimen of Three Strassburg Masters, Also Known as *Schatz der wijsheit vnd der kunst verborgenlich*

The – now missing³¹ – manuscript Bad Berleburg, Sayn-Wittgensteinsche Schloßbibliothek, Ms. RT 2/6 (olim F 4, second half of the fifteenth century) contains, on fol. 209r–212v, a plague regimen which was composed for the city council by three Strassburg physicians around 1360. The texts, which begins without any title whatsoever, identifies its authors as “Albertus Rodolfus Henricus von Saiszen, Bernhart von Rostock vnd Henricus von Lubelck”³² and defines them “alle meyster in der artzney wonende zu Straißburg”³³ (all masters in the art of medicine and living in Strassburg). Sudhoff identifies “Albertus Rodolfus Henricus von Saiszen” with a certain Master Henricus of Saxony from Northausen appearing in the sources and suggests that “Henricus von Lubelck” could be a student of Bernhard of Rostock.³⁴

The actual tract by the three masters only corresponds to the first part of the manuscript text, while the section beginning on fol. 211r and entitled *Dy sache der pestilentie vnd die behudung dar vor* (The causes of the plague and how to protect from it) is considered the result of the interpolation with an originally independent work, whose author is unknown.³⁵

A brief reference to the causes of the plague is present at the beginning of the text, when the three physicians explain the project of their work and declare their willingness to epitomize the knowledge they have acquired from the reading of various sources on the pestilence before this arrives in the city and before the poisoned air gains the upper hand:

. . . vnd aller artznye kunst mit kurtzen Worten getruwelich wir hant zusammen gelesen vor den jenen doit vnd erbenlich plage, die dan Ignoten teglich ist mit dem lufft der pestilentz vnd anhangen vergifft vnd von beyden sijten kumpt vnd ee dan der vergiffte lufft zus-tark vnd zuvil oberhantnemen.³⁶

³¹ See also <https://handschriftencensus.de/15960> (last accessed on Jan. 24, 2024).

³² Sudhoff, “Pestschriften XVI” (see note 27), 12. With “Lubelck” is certainly meant ‘Lübeck.’

³³ Sudhoff, “Pestschriften XVI” (see note 27), 12–13.

³⁴ Sudhoff, “Pestschriften XVI” (see note 27), 19–20.

³⁵ On this, see also Hartmut Broszinski, “Bernhard von Rostock,” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 1: >A solis ortus cardine< – Colmarer Dominikanerchronik, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1978), 773–74.

³⁶ Sudhoff, “Pestschriften XVI” (see note 27), 13.

[. . . and we have faithfully summarized all the things we have read in medical texts before that plague and terrible death with which unknown perpetrators poison every day the air comes from both sides and before the poisoned air becomes too much and takes the upper hand.]

As in Konrad von Megenberg and in the largest part of the Latin authors, the element responsible for the diffusion of the disease is the air that is poisoned (“vergift”) by some external agent. In this case, however, the reference to unknown perpetrators (“Ignoti”) suggests that the authors considered the plague as the result of a deliberate human action aimed at spreading a manufactured pathogenic poison. Interestingly enough, these perpetrators are not identified as belonging to any particular minority (e.g., Jews), as it was often the case in other contemporary works ascribing the plague to some form of deliberate poisoning.

In the interpolated text, on the other hand, the focus is clearly on the corruption of the air triggered by a negative star conjunction:

In dem ersten von der pestilentien, die ander von der behutniße ader warnung vor der selben vnd zusterunge des lufftes. Sie heißet auch epidemia daz sie dem menschen hin offzucht vnd mit dem vergiftigen lufft an sin hertz sitzt vnd yn dodet snellech. Item meynet auch daz aller zurstorter lufft vnd vergiftiger kompt von jnfloß vnd sachen wegen des hymmels vnd der planeten wirkunge.³⁷

[On the plague in the first place, then on the protection against it and the destruction of the air. It is also called epidemics, it affects human beings, it dwells in their hearts with the poisonous air and kills them quickly. Remember also that all destroyed air comes from the influence of the sky and the planets.]

The terms used here to refer to the corruption of the air are the adjective “vergiftig” ‘poisonous’ and the participle “zurstort” ‘destroyed,’ possibly indicating that the air has been destroyed in its natural substance and becomes noxious.

Jakob Engelin’s *Also das ein mensch zeichen gewun*

Jakob Engelin from Ulm, also known as Master Jakob from Ulm (ca. 1365–1420), studied in Paris and later in Vienna, where he was active as personal physician of Leopold IV, Duke of Austria (1371–1411) until 1406.³⁸ In addition to various Latin

³⁷ Sudhoff, “Pestschriften XVI” (see note 27), 16.

³⁸ Heinz-Jürgen Bergmann, *‘Also das ein mensch zeichen gewun’ Der Pesttraktat Jakobs Engelins von Ulm. Untersuchungen zur mittelalterlichen Pestliteratur*, 2 (Bonn: Horst Wellm Verlag, 1972), 19.

works on medical, surgical, and more generally scientific topics, Engelin wrote, around 1400, a plague tract in German which is known, from a phrase occurring in it, as *Also das ein mensch zeichen gewun*. This text, which was likely intended for a public of either medical laymen or barbers and surgeon lacking university education and, therefore, unable to read Latin, enjoyed great popularity throughout the fifteenth and until the beginning of the sixteenth century. This popularity is witnessed by the large number of manuscripts – over twenty³⁹ – transmitting it, often along with or interpolated with parts of other German texts. As for the geographical distribution of these manuscripts, the largest part of them can be located in the Bavarian, Austrian, and Upper Franconian area.⁴⁰

This short text can be described as a popularizing bloodletting regimen as many others produced in the period, which, despite not proposing any innovation in terms of diagnostics, therapy or prevention of the plague, stands out for its clear and straightforward structure. The author describes first the appearance of the disease in the parts of the body which are more vulnerable to it (heart, liver, and brain) and the symptoms it causes. After having briefly presented the etiology of the plague, he then moves to its therapy dealing with each relevant body part separately. The text ends with some prognostic notes. These elements are present throughout the manuscript tradition, even in the most abbreviated versions of the text. Some of the adapters, however, seem to have tried to complete Engelin's tract with indications on the prophylactic measures which could be adopted to prevent contagion. This is most likely the reason why the text is often transmitted along with other works on the topic.⁴¹

The very fact that Engelin wrote in vernacular addressing laymen, unlearned barbers, and surgeons does not mean that his plague tract was not read and used also by learned physicians, as an analysis of the context of its tradition clearly shows: many manuscripts have a monastic origin, some of them also include theological and philosophic-scientific works, one is a Salernitan medical miscellanea, another one was used by an East-Bavarian late medieval practitioner who wore it as girdle book when going to visit his patients.⁴²

39 Heinz Bergmann, "Engelin, Jakob (Meister Jakob von Ulm)," *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 2: *Comitis, Gerhard – Gerstenberg, Wigand*, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1980), 561–63, mentions twenty-nine manuscript witnesses of Engelin's original text or parts of it. See also <https://handschriftencensus.de/werke/2133> (last accessed on Jan. 24, 2024), on the other hand lists twenty-one and two fragments transmitting the plague tract. In addition to these, a French version of the text also exists and is preserved in four fifteenth-century manuscripts.

40 See also Bergmann, 'Also das ein mensch zeichen gewun' (see note 38), 40.

41 See also Bergmann, 'Also das ein mensch zeichen gewun' (see note 38), 45–46.

42 See also Bergmann, 'Also das ein mensch zeichen gewun' (see note 38), 46.

The section on the causes of the plague is introduced by the rubric “Von der vergiftung der pestilentz” (On the poisoning of the plague) and provides this explanation for people getting ill:

Nun solt ir wissen das alle giffit kompt von dem lufft, so der vergiffit ist. Vnd aller vergiffit ist die eigenschafft, das sy mit ganczer krafft zerstort die natur dz menschen vnd pringt dem menschen den tod. Also so der vergiffitig lufft ein get in das mensch, zehant laufft das giffitig plüt zw dem herczen, vnd also von dem giffitigen pluett so wirt das hercz todlich versert. Alß pald dan das hercz enpfindt des vergiffitigen pluett, so sendt es das selb pluett zw seiner firbung vnder dy vchsen. Ist dan das das giffitig pluett nit auß mag vnder der vchsen, so get es zw der lebern vnd in das hirn; vnd also an den iij haubt gliedern wirt des menschen natur zerstort vnd pringt jm den todt.⁴³

[You should know that all the poison comes from the air which is contaminated. And this poison has the capacity to destroy with full force the human nature and to bring people to death. When poisoned air is inhaled, poisoned blood flows to the heart and damages it irreparably. As soon as the heart perceives this poisoned blood, it sends it to its point of drainage under the armpits. If the poisoned blood cannot be eliminated under the armpits, it goes to the liver and the brain. In this way the human nature is destroyed in the three main body parts and the patient dies.]

In Engelin's view, air is the vehicle of transmission of the plague: if the air is contaminated (“vergiffit”), those who inhale it get infected with this lethal “gift” (‘poison,’ but used also in the meaning of ‘disease’). Once inhaled, this pathogenetic element triggers a chain reaction in which blood becomes infected (“vergiffitig” ‘poisonous’), reaches the heart damaging it and, eventually also the liver and the brain.

Hans Wirker's *Ain Regiment sich zů behieten vor der uergiftigenn vnrainen bösen Pestilentz*

A continuation and extension of Jakob Engelin's work can be found in that of Hans Wirker (or Würker) who moved to Ulm in 1434 and two years later was sworn in as city physician. In his *Regiment sich zů behieten vor der uergiftigenn vnrainen bösen Pestilentz* (Regimen to protect oneself against the poisonous, impure, and evil pestilence) of 1450, in fact, Wirker goes beyond the merely prophylactic aim suggested by the title and proposes a wide catalogue of remedies which can be used both as therapeutic and as prophylactic instruments. The text, which is transmitted in a longer and in a shorter redaction in three fifteenth-century

⁴³ Bergmann, ‘Also das ein mensch zaichen gewun’ (see note 38), 53–54.

manuscripts,⁴⁴ was in 1493 commented by Wirker's grandson, Johannes Straler on the request of Heinrich Steinhöwel and Johannes Stocker. This commentary is included, as marginal, in Augsburg, Staats- und Stadtbibliothek, 4° Cod. 121, fol. 40v–56r.

In the longer redaction the text consists of seven chapters preceded by a short preface and dedicated, respectively, to the nature and origin of the pestilence, the natural signs indicating its outbreak, the reason why some people fall ill and other not even though they live in the same place, the diet one should follow during a pestilence, the methods to purify the air, the medical remedies which can be useful, and the treatment of the buboes.

The first chapter of the treatise deals, as we have seen, with the nature and the causes of the plague (“Was sy pestilentz und ir ursach”). The nature of the disease is explained in these terms:

Pestilentz ist ain fieber oder ain bestette hitz des hertzen und ander gelider: die uff erstanden ist von den fulen süchtigen karten, die in der hōlin der hertzen sind, und von dem fullenn giftigen lufft der in das hertz durch die naß, durch den mund mit dem autem und ander weg gezogen wirt.⁴⁵

[Plague is a fever or an enduring heat of the heart and of other body parts which has originated from the rotten, sick membranes that are in the heart chambers and from the rotten, poisonous air that enters and escapes the heart through the nose and the mouth when breathing.]

Once again, contagion comes from inhalation of ‘rotten’ (“ful”) and ‘poisonous’ (“giftig”) air. The ultimate cause of the poisoning of the air is to be searched in celestial influence and in its putrefaction (“füly”) as a consequence of the contamination with impure and bad vapors (“vnrain bos dampf”):

Wann so der lufft von innflüß des gestirnes ain füly enpfacht, also das vnrain bos dampf sich vermischet mit dem lufft, so verderbet er di complexion des gaistes in dem hertzen und fulet das plüt . . .⁴⁶

[When the air putrefies under the influence of the stars so that the impure, bad vapor mixes with the air, then it corrupts the texture of the spirit in the heart and lets the blood rot . . .]

⁴⁴ On the manuscript tradition, see <https://handschriftencensus.de/werke/4618> (last accessed on Jan. 24, 2024) and Gundolf Keil, “Wirker (Würker), Hans,” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 10: *Ulrich von Lilienfeld – ‘Das zwölfjährige Mönchlein’*, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1999), 1249–51.

⁴⁵ Sudhoff, “Pestschriften VII” (see note 30), 187.

⁴⁶ Sudhoff, “Pestschriften VII” (see note 30), 187.

The process described by Wirker is pretty much the same as the one in Engelin's text. Nevertheless, the terminology employed to outline it is not only more various, but also mainly connected with the ideas of impurity, rot, corruption, and decay, rather than simply with that of poison (and poisonous) as both the trigger and the effect of contagion.

Moreover, interesting references to a series of environmental conditions which appear to be connected with the emergence of the pestilence can be found in the chapter dedicated to the signs announcing it. The ambivalence of these phenomena as both predictive elements and causes of an outbreak is stated by Wirker right at the beginning of the chapter: "Die vorgenden zaichen sind, die och ain tail sachend die pestilenz"⁴⁷ (The following are the signs of the pestilence which, in part, also cause it).

Wann an dem hörpst besunder und in den anderen ziten och werdent gesechen vil steren an dem himel die herabfallent, die als die rechten sternen schinent und fürin sülen und och brinnen oder schinent blick oder balcken und fürin pfil und so mengklich wenet nach schicklichkeit der wolcken, es sällend regen kummen und doch nit regnet. und in ainem tag und in einer stund wirt der himel schön und liecht und tunkel und och trieb und genübelt, und ain tag kalt der ander warm, ainer fucht der ander trucken. Und das die sunn uff gatt mit ainem nebel, der ist gleich als ain pulver, und die wind vast ufferstond von mittag vnd das die vogel uß iren nestern fliegent und sy verlaussen dar inn yre aier. Und das die tier die in dem ertrich wonend uß dem ertrich fliechend, und das der tier die uß denn fulen sachen wachsend vil werdent, als die wirm und die fresch, und etwen merend sich die urschlecht.⁴⁸

[When, particularly in autumn but also in other seasons, many falling stars can be seen in the sky and they shine as real stars and fire columns and there shine and burn as many lightnings and thunderbolts as when, from the position of the clouds, it should rain, but it does not rain. And in one day, in an hour, the sky becomes beautiful and clear and then dark and overcast, and one day cold and the other warm, one humid and the other dry. And the sun rises with a fog that is similar to dust and almost resists to the wind of midday. And the birds fly away from their nests leaving their eggs behind. And the animals which live in the earth escape from it and the animals, as worms and frogs, which grow from putrefaction increase in number and the cases of skin eruptions become more frequent.]

Wirker draws here a connection between the occurrence of certain anomalous natural events and the insurgence of the disease: an excessive number of falling stars, the appearance of lightnings and thunderbolts without rain, an extreme variability of the weather conditions, the appearance of a particularly persistent fog are the signs he associates with the corruption of the air determining the

⁴⁷ Sudhoff, "Pestschriften VII" (see note 30), 188.

⁴⁸ Sudhoff, "Pestschriften VII" (see note 30), 188–89.

plague. These signs are, in some way, perceived by the birds and animals which suddenly change their behavior. The final elements of this description – the increased number of creatures growing from rotting substances (“fulen sachen”) along with the higher frequency of people with rashes and skin eruptions – once again contribute to reinforce the association between plague and rot, corruption, putrefaction which seems to constitute the common thread in Wirker’s terminology to refer to the environmental causes of the plague.

Heinrich Steinhöwel’s *Büchlein der Ordnung der Pestilentz*

In 1450 Heinrich Steinhöwel (1412–1478) succeeded Hans Wirker as city physician in Ulm, where some twenty years after, in 1473, he published the first German plague tract ever printed, the *Büchlein der Ordnung der Pestilentz* (Booklet on the regimen of the plague).

Despite being mainly known in its printed form, however, the text was not written directly for the print (as stated by Sudhoff),⁴⁹ but composed already in 1446 during a plague outbreak in Steinhöwel’s hometown, Weil,⁵⁰ as witnessed in St. Gall, Kantonsbibliothek, VadSlg Ms. 455, fol. 44r–60r (third quarter of the fifteenth century).⁵¹ The text of the *editio princeps* (Ulm: Johann Zainer der Ältere, January 11, 1473, in quarto) follows the manuscript text quite faithfully, but is introduced by a new preface with dedication to the citizens of Ulm and translates into German all the references to Latin sources and a Latin recipe (fol. 39r) present in the manuscript.⁵² This first printed edition was followed by various others printed in Ulm, Nuremberg, and Strassburg and a Low German one (Braunschweig: Hans Dorn, 1506, in quarto).⁵³ Moreover, parts of the plague tract are also transmitted in three further manuscript witnesses – Augsburg, Staats- und Stadtbibliothek, 4° Cod. 121, fol. 56v–60r (end of the fifteenth century); Boston (MA), Medical Library, W. N. Ballard Coll. 734, fol. 2r–21r (sixteenth century); Schaffhau-

49 Karl Sudhoff, “Der Ulmer Stadtarzt Dr. Heinrich Steinhöwel,” *Die ersten gedruckten Pestschriften*, ed. Arnold C. Klebs and Karl Sudhoff (Munich: Verlag der Münchner Drucke, 1926), 193.

50 On this, see also Gerd Dicke, “Steinhöwel, Heinrich,” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 9: *Slecht, Reinbold – Ulrich von Liechtenstein*, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter: 1995): 258–78; here 261.

51 See also Beat Matthias von Scarpatetti, *Katalog der datierten Handschriften in der Schweiz in lateinischer Schrift vom Anfang des Mittelalters bis 1550*. Vol. 3: *Die Handschriften der Bibliotheken St. Gallen – Zürich, Text- und Abbildungsband* (Zürich: Dietikon, 1991), 273.

52 Dicke, “Steinhöwel, Heinrich” (see note 50), 261.

53 See also <https://gesamtkatalogderwiegendrucke.de/docs/STEIHEL.htm> (last accessed on Jan. 24, 2024).

sen, Stadtbibliothek, Cod. Gern. 26, fol. 2r–47v (fourth quarter of the fifteenth century) – which derive from the printed text.⁵⁴

Both in the St. Gall manuscript and in the printed editions, the text is divided into a pathogenic-prophylactic and a therapeutic section. The first of these deals with the etiology of the plague, its symptoms, prescribes a series of hygienical and dietetical behaviors to stay healthy (“gesüntlich ze leben”),⁵⁵ and ends with a series of remedies to prevent and treat the plague. The second part, on the other hand, provides therapeutic indications, operative instructions for bloodletting and recipes for the preparation of drugs which, in order to be forwarded to pharmacists, are often written in Latin.⁵⁶

When dealing with the etiology of the plague, Steinhöwel immediately states that “die pestilencz etwan *kommt von heimlichen inflüsse des himel*”⁵⁷ (the plague comes from the secret influences of the sky). This theme is, however, not further developed, as it should be dealt with by astrologists.⁵⁸ The author moves, therefore, to the ‘visible’ (“schinbarlich”) signs of the disease and refers to Hippocrates:

Etwan von schinbarlichen dingen / als Ipocras spricht. von grosser verkerung der zýt / vñ irer natur als wann der summer kalt vnd fücht ist mit vil regen / vnd der winter warm / der kalt sýn sol vnd mitt vil regen. vnd des selben gelychen das glencz vnd der herbst ir natur nit behalten . . . Och mer sýnd zeichen der pestilencz / schinbarlicher ding / als die schiessenden stern / die fürin springenden geis / die schiessenden tracken / Cometen / vnd des gelychen . . . Vnd dar zû ist ein hilfflich sach der pestilencz / grosse trückne des summers / mit gar wenig oder keinem regen / vnd besunder sýnes enndes vnd och des glenczes / vnd sýnd villýcht die beide kalt vnd dar nach komt ein warmer osterwind / vnd betrúbt etlich tag den lufft / dar nach so wirt der lufft lauter vnd clar / vnd wirt des tages vil wermý / vnd die nacht kalt oder vil nebel / vnd ist gestalt als ob es regen wölle / vnd es regnet doch nit.⁵⁹

[On the visible signs, as Hippocrates says: a great and unnatural distortion of the seasons, as when the summer is cold and humid with much rain and the winter, which should be cold and with much rain, warm. The same is true for the spring and the autumn when they do not maintain their nature . . . There are also more visible signs of the plague as the falling stars, lightnings, thunderbolts, comets and similar . . . Another condition helping the plague is a great drought during the summer, in particular toward its end, or during the

⁵⁴ On this, see Dicke, “Steinhöwel, Heinrich” (see note 50), 261 and <https://handschriftencensus.de/werke/3180> (last accessed on Jan. 24, 2024).

⁵⁵ Heinrich Steinhöwel, *Büchlein der Ordnung der Pestilencz* (Ulm: Johann Zainer der Ältere, 1473), 5.

⁵⁶ See also Dicke, “Steinhöwel, Heinrich” (see note 50), 262.

⁵⁷ Steinhöwel, *Büchlein der Ordnung* (see note 55), 6

⁵⁸ Steinhöwel, *Büchlein der Ordnung* (see note 55), 6: “da von ich astrologis enpfilhe ze reden” (I suggest that astrologists speak of this).

⁵⁹ Steinhöwel, *Büchlein der Ordnung* (see note 55), 6–7.

spring, or when both of them are cold and then comes a warm East wind blurring the air. Then the air becomes clear, and the weather is very warm during the day and cold at night, or there is much fog and it seems as if it should rain, but it does not rain.]

Among the visible signs of an upcoming plague, Steinhöwel lists, as already Wirker had done, a series of abnormal natural events which are, at least partially, considered as contributing to the development of the disease (“hilfflich sach der pestilencz”).

As for the real causes (“vrsach”) of the plague, he mentions the poisoning of the air caused by miasmata of various sort:

Vil synd ander vrsach der pestilencz / dar durch der lufft vergifft wirt / als etwann von toten lychnam eins strittes / oder giftig tãmpff vß den gröbern / oder vil schölmen des toten vihes / oder etwann vnrein gewürm vnder dem ertrich / der stanck von dem flachsz vnd hanffrössen vnd des gelichen.⁶⁰

[Many are the causes of the plague which poison the air: the corpses of the dead in a battle, the poisonous vapor from graves, the carcasses of dead animals, the impure worms living undergrounds, the stench of retting ponds and similar.]

All these – rotting – substances can be at the basis of the corruption of the air, which becomes poisoned (“vergifft”) and causes the plague.

Hieronymus Brunschwig's *Liber pestilentialis*

Best known for his surgical handbook – the *Buch der Cirurgia, Hantwirkung der Wundartzny*⁶¹ – published for the first time in 1497, the travelling surgeon⁶² and

⁶⁰ Steinhöwel, *Büchlein der Ordnung* (see note 55), 7–8.

⁶¹ The *Buch der Cirurgia*, the first surgical handbook printed in German, is mainly a compilation of Classical, Arabic, Medieval and Late Medieval sources aimed at being useful to all those wishing to learn the art of surgery. The text is divided into seven treatises dealing with the role and the function of the surgery, the different kinds of wounds and their etiology, accidental and deliberate blows, fractures, and their reduction, and including an *antidotarium*, a collection of all the remedies potentially useful to a surgeon. On Brunschwig's surgical handbook, see also Chiara Benati, *Das Boek der Wundenartzstedye und der niederdeutsche chirurgische Fachwortschatz*. Göppingen Arbeiten zur Germanistik, 771 (Göppingen: Kümmerle Verlag, 2012), 7–10.

⁶² On this, see also Ludwig Choulant, *Graphische Incunabeln für Naturgeschichte und Medicin* (Leipzig: Weigel, 1958), 75; and Friedrich Wieger, *Geschichte der Medizin und ihrer Lehranstalten in Strassburg* (Straßburg: Trübner, 1885), 13.

possibly chemist.⁶³ Hieronymus Brunschwig also dedicated a booklet to the treatment of the plague, the *Liber pestilentialis de venenis epidimie. Das bûch der vergift der pestilenz das da genant ist der gemein sterbent der Trûsen Blatren*, which appeared in Strassburg in 1500.

This short text, which is transmitted only in the 1500 edition by Johannes Grüninger,⁶⁴ enjoyed less popularity than Brunschwig's other works, which were repeatedly reprinted,⁶⁵ and has been almost completely ignored by scholarly research. In his entry in the *Verfasserlexikon* on Hieronymus Brunschwig, Frederiksen underlines that the booklet is strongly indebted to Heinrich Steinhöwel's *Büchlein der Ordnung der Pestilenz*.⁶⁶ The theme of Brunschwig's dependence on Steinhöwel is further addressed in an article by Zapf, who underlines that Brunschwig integrated his main source with a few considerations based on his own personal experience and referring not only to the plague, but also to syphilis.⁶⁷

The 1500 incunable consists of 40 leaves, the first four of which – including title, preface and index – are unnumbered, whereas the following 36 are numbered. Catchwords are not used, while the first page of each section is identified with signature marks A to G. The text is printed on two columns and is accompanied by 23 woodcuts, which in some copies such as the one preserved in Wolfenbüttel⁶⁸ have been colored, and by 40 printed “pointed hand” nota marks. For many illustrations, some of which are repeated more than once, the same woodcuts appearing in the *Buch der Chirurgia* have been used.⁶⁹

The booklet begins with a preface (“Ein vorred”) strongly indebted to Steinhöwel's one, in which Brunschwig claims that surgeons need to be involved in the treatment of the plague together with physicians. In fact, since the treatment of peo-

⁶³ The assumption that Brunschwig was also active as a chemist is supported by the fact that he published, in 1500 and 1512, two distillation books: *Liber de arte distillandi de simplicibus* (*Kleines Destillierbuch*) and *Liber de arte distillandi de compositis* (*Großes Destillierbuch*). On this, see also Benati, *Dat Boek* (see note 61), 5.

⁶⁴ See also <https://gesamtkatalogderwiegendrucke.de/docs/GW05596.htm> (last accessed on Jan. 24, 2024).

⁶⁵ See also Volker Zapf, “Brunschwig. Hieronymus,” *Deutsches Literatur-Lexikon. Das Mittelalter. Autoren und Werke nach Themenkreisen und Gattungen*. Vol. 7: *Das wissensvermittelnde Schrifttum im 15. Jahrhundert*, ed. Wolfgang Achnitz (Berlin and Boston: Walter de Gruyter), 1532–37.

⁶⁶ Jan Frederiksen, “Johannes (Hans) von Gersdorff (Schielhans),” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 4: *Hildegard von Hürnheim – Koburger, Heinrich*, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1983), 626–30.

⁶⁷ Zapf, “Brunschwig, Hieronymus” (see note 65), 1531.

⁶⁸ Wolfenbüttel, Herzog August Bibliothek, 456–17-theol-2f-2.

⁶⁹ See also Henry E. Sigerist, *The Book of Chirurgia by Hieronymus Brunschwig, with a study on Hieronymus Brunschwig and his work* (Milan: Lier, 1923), XV.

ple affected by the plague was generally left to physicians, he needed some form of justification for writing this text himself. For this reason, he maintains to have lived through the plague of 1473 in a not better specified city and two further outbreaks and to have witnessed all the atrocity of these epidemics: men knew no longer love and friendship, and cruelty ruled, the sick were cast out into the street or shut up in their houses and physicians fled. Only surgeons remained, which gives them the right to deal with this topic.⁷⁰ He also declares to have been encouraged to write this work, in order to synthesize the teachings of the most prominent and experienced physicians, because “wan lang matery dem leser vnd lerenden vnuerstentlich wer” (a long exposition would be incomprehensible to both the reader and the learner).⁷¹ As in the *Buch der Cirurgia*, he adds that he wants to help all the young surgeons and barbers, who have to perform bloodletting and to heal abscesses, buboes, carbuncle, anthrax, etc.

This preface is followed by a table of contents and by another index aimed at helping those who do not wish to read too much to find quickly the most important topics. The text itself is divided into four treatises dealing with the nature and the origin of the plague, the prevention of the disease, as well as with the treatment of the infected and the healing of buboes, carbuncle and anthrax. A fifth – short – treatise summarizes the most important preventive and therapeutic behaviors to adopt during an epidemic outbreak.

Interestingly, the final colophon –

Durch die hilfß des almechtigen gots dyß büchlin ich Ieronimus brunschwig wund artzet der keiserlichen fryen statt straßburg geendet hab . . . Vnd das getruckt vnd volendt durch meister Hansen grüninger vff mitwoch nach vnser lieben frowen hymelfart in dem iar als man zalt j. 500. iar.⁷²

[With the help of God, the Almighty, I, Hieronymus Brunschwig, surgeon in the free imperial city of Straßburg, have finished this booklet . . . and it was printed and completed by master Hans Grüninger on the Wednesday after Our Lady's Assumption in the year 1500, as it is counted.]

⁷⁰ See Hieronymus Brunschwig, *Liber pestilentialis de venenis epidemie. Das büch der vergift der pestilenz das da genant ist der gemein sterbent der Trüsen Blatren* (Straßburg: Grüninger, 1500), fol. Aiiiv-Aiiijr. See also Sigerist, *The Book of Cirurgia* (see note 69), XIII–XIV. The importance of the role of barbers and surgeon in the attempts of treating the plague is also stressed by Manfred Vasold, *Pest, Not und schwere Plagen: Seuchen und Epidemien vom Mittelalter bis heute* (Augsburg: Bechtermünz, 1999), 101.

⁷¹ Brunschwig, *Liber pestilentialis* (see note 70), fol. Aiiijr.

⁷² Brunschwig, *Liber pestilentialis* (see note 70), fol. XXXVIr.

– appears in two different forms in the preserved copies of the incunable: Some of them, in fact, read “doch vnderwegen ließ vnd das nach den besten flyß gemacht hon . . .” (But [I] left it incomplete and I did this with the best diligence),⁷³ while others have a negation and two abbreviations in this sentence “doch nit vnderwegen ließ vnd das nach den besten flyß gemacht hon” (But [I] did not leave it incomplete and I did this with the best diligence).⁷⁴ The former reading does not make any sense in the context of the explicit of a book, since no author would ever declare that he left his work incomplete with the best diligence. For this reason, we can assume that it represents the first, erroneous, version of the printed text which was later emendated by the insertion of the negation and, to minimize the impact of this correction, by the replacement of the final *n* and *d* of “vnderwegen” and “vnd” with a stroke over the preceding letter, in order to compensate the addition of “nit.”

In the second chapter of the first treatise, Brunschwig deals with the etiology of the disease and ascribes the outbreak of the plague to four orders of causes (“wo von sie kumpt oder entspringt”): 1. it can be the result of divine punishment for the sins of mankind;⁷⁵ 2. it can be caused by the influence of the stars; 3. it can be the consequence of bad dietary habits; or 4. it can be determined by the climate. In the context of the present study, the second and the third order of causes are particularly relevant, since they can be described as environment related.

The negative influence of the stars causing the plague is identified by Brunschwig as “heimliche influße des gestirns,”⁷⁶ ‘secret influences of the stars,’ an expression corresponding to the one used by Steinhöwel: “heimliche influße des

73 This reading is for example transmitted in the copies preserved in Bethesda, Linz, Wolfenbüttel, Washington and in one of the two at the Bayerische Staatsbibliothek in Munich (2.Inc. c.a. 3868).

74 E.g., in the copies in Harvard, Gdansk and Munich (Rar. 2162.1).

75 The passage describing this first order of causes, which does not find any correspondence in Steinhöwel’s work, uses the tones and the imagery of a homily, where sin-and-punishment-related exemplary Biblical episodes (the end of plague in Israel described in 1 Chronicles 21: 27 and David’s adultery with Bathsheba in 2 Samuel 11) are either quoted or referred to. See Brunschwig, *Liber pestilentialis* (see note 70), fol. Iv: “die pestilenz sunderlich alleyn kumpt von der straff gots von vnser grossen sünde wegen. als man lißt das der engel gottes syn blütiges schwert in sin scheid stieß vnd der sterbot vff hören was. Vnd als man lißt do Dauid nam vnd beschleiff Vrian sin husßfrow vnd zalen was dz volck wie mechtig er was.” (The plague derives exclusively from God’s punishment for our great sins. As one reads the angel of God put his sword back into its sheath and the plague ended. And as one reads that David took Uriah’s wife and slept with her and showed his people how powerful he was.)

76 Brunschwig, *Liber pestilentialis* (see note 70), fol. Iv.

himel,” ‘secret influences of the sky.’ The connection between a negative star conjunction and the outbreak of the plague is explained as follows:

die pestilenz oft kumpt von den heimlichen influenzen des gestirns durch die angesicht eins bösen planeten wan er sin kraft vff dis erdtrich geben ist durch des ynfluß in dem boden des erdtrichs die elementen vergifft werden / vnd so der luft in dem erdtrich beschlossen ist do von die vergifftigen thyer die in dem ertrich sint her vß fliehen von den vnd andern vergifftigen thyren der luft vergiftiget würt / vnd dan nemlich von der vermischung des vergifftigen fulen luftts die füchtigkeit der erden die erden durch füchtet do krüter vnd frucht von wachsen. do von die menschen vnd thyer die dz niessen vergifft werden / vnd so nun dz element vnd die füchtigkeit die in der erden verschlossen ist / vergifft sint do von dz wasser dz durch die erd flüset vergifft ist / dz vergift dan lüt vnd vihe die dz trincken.⁷⁷

[The pestilence often derives from the secret influences of the stars through the presence of a bad planet displaying its force on the earth. Through this influence the elements in the bowls of the earth become poisoned, and the same happens to the air enclosed in the earth. This makes escape the poisonous animals living in the earth which, together with other poisonous animals, poison the air. The bad poisoned air penetrates the soil where plants and fruits grow. These poison the men and the animals eating them and when the element and the moist which are enclosed in the earth are poisoned, the water flowing through the earth is poisoned and poisons the people and the animals drinking it.]

The keywords of this detailed explanation, which is not completely derived from the *Büchlein der Ordnung der Pestilenz*, are the participle “vergifft” (or “vergiftiget”) ‘poisoned, contaminated’ and the adjective “vergiftig” ‘poisonous,’ that are repeated several times within a few lines. The same terms are employed to describe another form of environmental contamination producing miasma which, however, cannot be ultimately ascribed to the influence of stars and planets, but rather to human actions:

des gleichen so der vergiftig luft von dem menschen ingezogen würt in die lung mit sym athem / vnd dz geschicht etwan von grossen striten so die korper der todten vff dem ertrich blibent ligen / von denen vergifft würt der luft.⁷⁸

[The same happens when poisoned air is inhaled by human beings and reaches their lungs during breathing. This happens after a large battle, when the corpses of the dead remain on the ground and poison the air.]

As for the fourth category of possible causes of the plague, Brunschwig agrees with Steinhöwel that significant (and sudden) weather changes and unusual climatic conditions can be listed among them:

⁷⁷ Brunschwig, *Liber pestilentialis* (see note 70), fol. Iv–Iir.

⁷⁸ Brunschwig, *Liber pestilentialis* (see note 70), fol. Iir.

Von schneller grosser verkerung der zyt / als wan der summer zû vil kalt vnd fûcht ist / vnd der winter zû vil warm. des glichen dz glentz vnd herbst ir natürlich würckung nit haben das dan ein böß zeichen ist.⁷⁹

[From quick and great changes of the weather, as when the summer is much too cold and humid and the winter much too warm. The same if spring and autumn do not have their natural effect. This is a bad sign.]

In both Brunschwig and Steinhöwel, these unusual climatic conditions are indicated as “grosse verkerungen der zyt” ‘great changes of the weather.’ In Brunschwig, however, the insertion of the adjective “schnell” ‘quick, fast’ underlines that these changes must happen within a short period of time in order to possibly cause an epidemic and to be considered a sign helping to predict it.

The Terminology for the Environmental Causes of the Plague in Other Vernacular Texts

As mentioned before, the largest part of late medieval vernacular plague writing has a purely pragmatic approach to the prevention and the therapy of the disease and, therefore, shows scarce interest for its causes. Very often, however, these texts touch upon them and can provide information on the terminology used to describe the environmental causes of the plague, as I will show in the following on the basis of two significant exemplary case studies.

The first example of a German text not discussing the etiology of the disease in detail but mentioning them cursorily is represented by *Ain wunderbäre instruction und underwysung wider die pestilentz* (An extraordinary instruction and teaching against the plague). The text, which appeared anonymously in 1494 but whose attribution to Ulrich Ellenbog is extremely likely,⁸⁰ describes in detail

⁷⁹ Brunschwig, *Liber pestilentialis* (see note 70), fol. Iir.

⁸⁰ The *Instruction* can, in fact, be correlated both with the manuscript pest tract transmitted in Donaueschingen, Fürstliche Fürstenbergische Hofbibliothek, Cod. 719 (1464), which explicitly mentions Ulrich Ellenbog as its author and which can be considered the draft for the instruction, and with the printed *Ordnung die doctor Ulrich von ellenbog Anno 1482 zuo Memingen der gemaind gesetzt hat*, which can be considered an abbreviated version of the *Instruction* for the general public. On this, see Peter Assion, “Ellenbog, Ulrich,” *Die deutsche Literatur des Mittelalters. Verfasserlexikon*. Vol. 2: Comitès, Gerhard – Gerstenberg, Wigand, ed. Kurt Ruh et al. (Berlin and New York: Walter de Gruyter, 1980), 495–501; here 498; and Anton Breher, *Der Memminger Stadtarzt Ulrich Ellenbog und seine Pestschriften*. Allgäuer Heimatbücher, 36 (Kempten: Otto Oechelhäuser Verlag, 1942), 9–37.

symptoms, patient care, remedies and explains the use of bloodletting in patients affected by the plague. The author is scarcely interested in the causes of the pestilence. Nevertheless, in his description of patient care references to the corruption of the air are quite frequent. In a paragraph dedicated to the distinction between air and wind (“Vom lufft und vom wind”), for example, he observes:

Lufft ist ain element und bleibt allweg in seiner sper und wirdet durch die wind geendert und verkert guot oder böß . . . Und die bößen wind corruppiere unnd verunrainen und machen böß den lufft.⁸¹

[Air is an element, remains in its sphere and can be changed by the wind becoming good or bad . . . And the bad winds corrupt and make the air impure and bad.]

Corrupted, contaminated air is here indicated as “böß” ‘bad, evil’ and it is this way because it has been corrupted (“corruppiere”) and made impure (“verunrainen”). The phrase “böße lufft” ‘bad air’ appears repeatedly in the text, e.g., in the indication on how to clean (“rainigen”) it.⁸²

The second example of a vernacular text mentioning the environmental causes of the plague without discussing them in detail is constituted by a plague regimen appearing in Vienna, Österreichische Nationalbibliothek, Cod. 14545, fol. 5v–12v as part of a collection of analogous pieces that have been translated from Latin into German and which are attributed to a certain Christianus von Prag.⁸³ This short regimen – *Vor dy pestilencia* – describes, in the first person, the procedure followed to treat a patient, as well as the prognostic signs one should pay attention to. No mention is made of any possible etiology of the disease, which is often referred to as “ungenade” ‘disgrace’ in a clearly religious vision, but indications are provided on how to fumigate the air in a sick person’s bedroom:

Ouch so sal man eynen rouch machen in dem slouff gemache des kranken von den wurtzenn thimema, mirren und weyrouch, lorbern und wachandeln, und sal thun sibem tage durch der vorgifftigen lufft wegen . . .⁸⁴

⁸¹ Breher, *Der Memminger Stadtarzt* (see note 80), 52–53.

⁸² See for example Breher, *Der Memminger Stadtarzt* (see note 80), 53: “Wie man bösen lufft rainigen soll.” (How one should clean the bad air).

⁸³ On this, see also Sudhoff, “Pestschriften VII” (see note 30), 103–04, where the manuscript is erroneously indicated as Cod. lat. 15545; Hermann Menhardt, *Verzeichnis der altdeutschen literarischen Handschriften der österreichischen Nationalbibliothek*. Vol. 3. Deutsche Akademie der Wissenschaften zu Berlin – Veröffentlichungen des Instituts für deutsche Sprache und Literatur, 13 (Berlin: Akademie Verlag, 1961), 1368.

⁸⁴ Sudhoff, “Pestschriften VII” (see note 30), 105.

[One should also prepare fumes in the bedroom of the sick using the root of thyme, myrrh, incense, laurel, and juniper. This should be used for seven days because of the poisonous air.]

The underlying idea that contaminated air can be a vehicle of transmission of the disease is well present also in this text and the term employed to indicate this contamination of the air is one of the most frequently used in German vernacular sources from the fourteenth and the fifteenth century: “vorgifftigen lufft,” ‘poisonous air.’

Conclusion

The aim of this study was to analyze a significant corpus of late medieval plague tracts in the German language with respect to their treatment of what we could call “environmental” causes of the pestilence, as well as to the terminology used to refer to them. As we have seen, an extensive coverage of the etiology of the disease is a prerogative of academic Latin sources which, often on the basis of antique and medieval Latin, Greek, and Arabic authorities, try to categorize and hierarchize remote and near causes of the plague. Vernacular texts, on the other hand, pursue a more pragmatic approach, as they often address practitioners lacking university education such as barbers and surgeons or even laymen who, during the Black Death, were repeatedly faced with the disease and needed to be instructed at least in a few basic prophylactic (hygienic and dietary) measures they could adopt in everyday life.

Nevertheless, the scrutiny of Sudhoff’s corpus of plague writings from the first 150 years after the Black Death has allowed the identification of five significant vernacular sources discussing the etiology of the pestilence that were produced over a timespan of ca. 140 years (ca. 1360–1500). Moreover, two representative examples of vernacular regimina not discussing the causes of the disease but referring to them have also been taken into consideration.

What emerges from this analysis is that all these German texts recognize a connection between a contaminated environment and the insurgence of the disease. Most commonly this contamination affects the air, in some authors, however, it can be extended to the water, the soil and the food – animals and plants – growing in these conditions. In some works (Wirker’s, Steinhöwel’s, and Brunschwig’s) a certain degree of causality is also ascribed to the prognostic signs associated with a plague outbreak. In accordance with the previous tradition, all German authors include in this category of prognostic signs anomalous weather conditions and astro-

nomical phenomena. None of them, however, recalls the association between disease and earthquakes made by Konrad of Megenberg.

As for the terminology employed to describe these environmental factors determining the insurgence and the diffusion of the disease, we can observe that the central concept of the contamination of the air is rendered with terms that are traceable to two different underlying ideas: corruption/putrefaction and poison, whereas Latin sources almost systematically associated the pathogenic contamination of the air with images of putrefaction and corruption (“aer putridus,” “corruptio aeris”).

Both these concepts are present in Konrad of Megenberg’s Latin tract on the plague which speaks of “exalacio terrestris corrupta et venenose” (corrupted and poisonous exhalation from the earth), while only the association with poison is maintained in the chapter on earthquakes of his German *Buch der Natur* (“der luft vor und nach so gar vergift wirt”). In the German sources analyzed the terms connected with poison and poisoning seem to be preferred, with the phrases “vergiftete luft” (poisoned air) and “vergiffite luft” (poisonous air) as standard designation for the concept. An exception in this respect is constituted by Hans Wirker’s *Regiment*, where a series of terms and images evoking the idea of decay, decomposition, and putrefaction (“fuly,” “verderbet”) are used. The verbs “corumpieren” (to corrupt) and “verunrainen” (to make impure) are also present in the *Instruction* attributed to Ulrich Ellenbog to hint at the corruption of the air. In this case, however, contaminated air is more generically called “böße luft” (bad air).

On the whole, this terminological analysis of a corpus of German plague tracts from the fourteenth and the fifteenth centuries has highlighted a substantial – and, with respect to other genres of medical and surgical texts,⁸⁵ striking – uniformity in the specialized vocabulary used to identify the environmental causes of the plague, which, in a historical-linguistic perspective, can possibly be ascribed to the dense production of plague-related works during the years of the Black Death in Europe.

From a more general point of view, the substantial and linguistic terminological similarities in the texts taken into consideration certainly highlight how present environmental themes were in contemporary medical discourse and how aware late medieval physicians, practitioners, and laymen were that this terrible disease

⁸⁵ On this, see also Chiara Benati, “Preventing Miscommunication: Early Modern German Surgeons as Specialized Translators,” *Communication, Translation and Community in the Middle Ages and Early Modern Period: New Cultural-Historical and Literary Perspectives*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 26 (Berlin and Boston: Walter de Gruyter, 2022), 393–413; here 393–94.

was the result of anomalous and adverse environmental conditions which they could try to mitigate with hygiene, prophylaxis, and healthscaping⁸⁶ measures. In this respect, these plague tracts from the fourteenth and the fifteenth centuries show how deeply intertwined nature and human health were in contemporary perception: on the one hand, a hostile environment – resulting from either natural or anthropogenic factors – could constitute a threat to human well-being, on the other, nature certainly represented the main source of remedy, as the largest part of late medieval cures were of natural origin.

⁸⁶ I use the term “healthscaping,” coined by Guy Geltner, “Healthscaping a Medieval City: Lucca’s *Cura viarum* and the Future of Public Health History,” *Urban History* 40.3 (2013): 395–415, in the meaning indicated by Lucy C. Barnhouse, “From Helpful Gardens to Hateful Words: Moral and Physical Healthscaping in the Late Medieval Rhineland,” *Disease and the Environment in the Medieval and Early Modern Worlds*, ed. Lori Jones. Themes in Environmental History, 2 (London and New York: Routledge, 2022), 52–64 here 52: “Healthscaping encompasses regulations and practices that may not align with modern, policy-based definitions of public health, but which were seen by medieval people as necessary for managing the health of communities and the spaces they used.”

Connie L. Scarborough

Island, Grove, Bark, and Pith: Nature Metaphors in Teresa de Cartagena

Abstract: Teresa de Cartagena was born in 1424 or 1425 to one of the most important Judeo-Converso families in Spain. She professed as a nun, initially in the order of the Clarisas, and lost her hearing when she was about 29 years old. Some 20 years after becoming deaf, sometime between 1473 and 1479, Teresa penned her first work, *Arboleda de los enfermos* [*Grove of the Infirm*]. In it, she seeks to console other disabled or infirm individuals by relating her own path toward acceptance of her condition. She uses a series of metaphors from the natural world to illustrate the spiritual awakening brought on by her deafness. Teresa's discussion of her physical impairment and the spiritual journey it engendered is so subtle and sophisticated that her role as the author of *Arboleda* was called into question. The text she wrote in response to those who doubted that she had written *Arboleda* is entitled *Admiración operum Dei* [*Wonders at the Work of God*]. Again, to defend her God-given ability to write, she resorts to metaphors from nature in defense of women's intellect.

Keywords: Teresa de Cartagena, island, grove, bark, pith, nature, consolation, disability

Introduction

The presentation and representation of nature in literary works has often been overlooked or sidelined in preference for the study of characters, plot, or theme. In medieval literature, this trend was true until efforts, spearheaded by the school of ecocriticism, were made to see beyond nature imagery as stylized or conventional. Intimate knowledge of the natural world allowed medieval writers to portray the environment in literal as well as metaphorical terms. Vivid examples of this phenomenon are the works of the fifteenth-century Castilian writer, Teresa de Cartagena.

One of the themes developed by Teresa de Cartagena in her text *Arboleda de los enfermos* [*Grove of the Infirm*] is the idea of exile on a metaphorical island. In this symbolic space, she will construct her grove of what she calls "buenos consejos

y espirituales consolaciones”¹ (“good counsel and spiritual consolation”).² On her metaphorical island, amidst a grove of allegorical trees, Teresa explores her own experience as a deaf person and writes a text to console others who suffer physical impairment or infirmity. The purpose of the present study is to show how Teresa uses these, and other elements from the natural world, to provide concrete images that will help others to understand the meaning(s) of disability and to accept their suffering. She also employs nature imagery when in her second treatise, *Admiración operum Dey* [*Wonder at the Works of God*], she is compelled to write a defense of her authorship of *Arboleda de los enfermos*.

Biographical Aspects

Teresa de Cartagena was born in 1424 or 1425 to one of the most important Judeo-Convertos families in Spain.³ Like other members of her family, she received an excellent education and Teresa herself alludes to a period of study at the University in Salamanca.⁴ Joan Cammarata concludes that Teresa knew Latin well and had knowledge of the writings of St. Jerome, St. Augustine, St. Bernard, and St. Gregory, among other doctors of the Church.⁵ Although the exact date of the onset of her deafness is not known, Yonsoo Kim postulates the earliest date for her hearing loss to be 1453, when she was approximately 29 years old.⁶ In *Arbo-*

1 All quotes from *Arboleda* are from Teresa de Cartagena, *Arboleda de la enfermos / Admiración operum Dey*, ed. Lewis Joseph Hutton (Madrid: Anejos de la Real Academia Española, 1967), here 38.

2 All translations are from Dayle Seidenspinner-Núñez, *The Writings of Teresa de Cartagena*. The Library of Medieval Women (Cambridge and Rochester, NY: D. S. Brewer, 1998); here 24.

3 Seidenspinner-Núñez details the lives and deeds of the Cartagena/Sant María family on pages 4–8 of the introduction of her book, *The Writings of Teresa de Cartagena* (see note 2). Other members of Teresa’s family were also important authors, including her grandfather, Pablo de Santa María (né Rabbi Šelomó ha-Levi) and her brother, Alonso de Cartagena, one of the leading humanists of the period.

4 “los pocos años que yo estudié en el estudio de Salamanca” (103; “the few years that I was at the University of Salamanca,” 80).

5 Joan F. Cammarata, “Teresa de Cartagena: Writing from a Silent Space in a Silent World,” *Monographic Review* 16 (2000): 38–51; here 38. Cammarata adds that it is impossible to know whether her familiarity with these authors came from her own reading of them or from what she learned from other members of her family or her confessors (38–39).

6 Yonsoo Kim, *El saber femenino y el sufrimiento corporal de la temprana Edad Moderna: Arboleda de los enfermos y Admiración operum Dey de Teresa de Cartagena* (Córdoba: Universidad de Córdoba, 2008), 45. Kim establishes that Teresa began to write *Arboleda* after her change of religious order.

leda she states that she had been deaf for twenty years before beginning to compose her work. She was not confined to the convent due to the onset of her hearing loss, as earlier critics supposed, because she was already a nun in the order of the Clarisas in Burgos when she became deaf due to an illness.⁷ In 1449, Teresa's uncle, the Bishop of Burgos, Alonso de Cartagena, petitioned the papacy for Teresa to change to the Cistercian order, and when she wrote *Arboleda*, she was probably living in the Cistercian monastery of Las Huelgas, near Burgos.⁸

***Arboleda de los enfermos* – The “Island” of Deafeness**

Arboleda de los enfermos was written probably between 1473 and 1474.⁹ As Teresa admits, she had had two decades to reflect on her condition, and her authoring the text was inspired by a desire to share what she had learned about impairment with others who were infirm or disabled. The bold act of writing as a woman in fifteenth-century Spain cannot be ignored.¹⁰ Moreover, Teresa's discussion of her own physical impairment is without precedent in Spain. Brenda Jo Brueggemann calls her writing a “triumph of resistance”: “Bound by legal, literary, social, and ecclesiastic discourses that dictate her inability to author, or to ‘hear’ the word of God, or to interpret text, Teresa's text is a triumph of resistance”¹¹

From the outset of *Arboleda*, Teresa stresses her feelings of solitude, of being cut off from others due to her hearing loss. Given her feelings of estrangement from others and the desire to avoid idleness, she states her motives for writing near the beginning of her treatise: “solamente por no dar lugar a estos daños, los quales son soledat e vçiosydat, e pues la soledat no puedo apartar de mí, quiero

7 Kim, *El saber femenino* (see note 6), 34–38.

8 In this petition, the Bishop asks that she be allowed to hold any position of authority in her new Order. Kim, *El saber femenino* (see note 6), 39 argues that exercising such roles would not have been possible if she had already become deaf. Therefore, when she was twenty-five years old, it is safe to deduce that Teresa had not yet lost her hearing.

9 Seidenspinner-Núñez, *The Writings* (see note 2), 4 and Kim, *El saber femenino* (see note 6), 45.

10 Although female writers in the fifteenth century were rare, Teresa is not unique. For example, Leonor López de Córdoba wrote an autobiography, *Memorias*, in which she defended her family's support of Pedro I against his half-brother Enrique. Cf. Albrecht Classen, *Reading Medieval European Women Writers: Strong Literary Witnesses from the Past* (Frankfurt a. M.: Peter Lang, 2016), 115–82.

11 Brenda J. Brueggemann, “Deaf, She Wrote: Mapping Deaf Women's Autobiography,” *Publications of the Modern Language Association* 120.2 (2005): 577–83; here 580.

fuir la vçiosydat porque non pueda trauer casamiento con la soledat, car sería vn pelygroso matrimonio” (38–39; “Since I cannot rid myself of solitude, I want to drive idleness away so that it cannot join with solitude, for this would be a dangerous marriage”; 25). She argues that when God chose to close her ears to sounds and voices, he actually blessed her with a special silence that allowed her to shut out the noise and distractions of the outside world and listen solely to the voice of God.¹² Teresa claims that God had touched her ears to deafen them to the chatter of the world and, as such, the illness that brought on her deafness was actually a gift, rather than a punishment, a gift from God that would direct her toward salvation:

E asý yo, estando enbuelta en el tropel de las fablas mundanas e bien rebuelto e atado mi entendimiento en el cuydado de aquéllos, no podía oýr las bozes de la santa dotrina que la Escritura nos enseña e amonesta; mas la piadat de Dios que estaua conmigo en este ya dicho tropel e con discreto acatamiento veýa ya mi perdición [e] conosçia cuánto era a mi salud conplidero çesar aquellas fablas para mejor entender lo que a mi saluación cumplía, hizome de la mano que callase. E bien se puede asý dezir, pues esta passion es dada a mí por su mano. (40–41)

[And thus enmeshed in the confusion of worldly chatter, with my understanding disordered and bound up in worldly cares, I could not hear the voices of holy doctrine that Scriptures teach us. But merciful God, who was with me in this din and with discreet observation saw my perdition and knew how important it was to my health to have the chatter cease so that I would better understand what was necessary for my salvation, signaled me with His hand to be quiet. And one may well say that this suffering is given to me by His hand.] (26)

Although Teresa eventually found solace in her impairment, she writes of her own struggles to accept her condition. She experienced a state of isolation that she likens to being exiled on a desert island with few inhabitants and harsh conditions. The island becomes a place of isolation from worldly distraction but it also serves as a metaphor for Teresa’s isolation from the company of others. Teresa explains how she feels in the company of the hearing: “quando en conpañía de otrie me veo, yo soy desanparada del todo, ca nin goxo de consorçio o fabla de aquéllos, nin de mí mesma me puedo aprouechar” (39; “When I find myself in the company of others, I am completely forsaken, for I cannot profit from the joy of companionship nor from the speech of those around me nor from myself”; 25). Even though Teresa had acquired the ability to speak since she was not struck deaf until she was in her late twenties, she chose not to speak or converse with others after the

¹² On this point, see Ronald Surtz, *Writing Women in Late Medieval and Early Modern Spain: The Mothers of Santa Teresa de Ávila*. University of Pennsylvania Press 125 Years Anniversary Series (Philadelphia, PA: University of Pennsylvania Press, 1995), 23.

onset of her deafness. She learned to live only for communication with God and sees this existence as a divine gift that led her to the proper path to salvation.

On her island, Teresa cultivates metaphorical groves of trees that represent “good counsel and spiritual consolation.” In her text, the more common associations of an island as a place of loneliness and trees as an element often associated with wilderness or danger are transformed into sources of spiritual nourishment.¹³

Teresa begins *Arboleda de los enfermos* with a greeting to the virtuous lady to whom the treatise is addressed. Although there is no sure proof of the identity of the lady, Teresa addresses her second book, *Admiración operum Dey*, to Doña Juana de Mendoça, so it may be assumed that the virtuous lady addressed in *Arboleda* is the same Doña Juana, wife of Gómez Manrique, a leading poet and politician of the fifteenth century. She was also lady-in-waiting to the infanta Isabel, princess of Portugal.¹⁴ After a brief introduction, Teresa begins her treatise: “Grand tiempo ha, virtuosa señora, que la niebla de tristeza temporal e humana cubrió los términos de mi beuir e con un espeso toruellino de angustiasas pasyones me lleuó a vna ýnsula que se llama ‘Oprobrium hominum et abiecio plebis’ donde tantos años ha que en ella biuo, si vida llamar se puede, jamás pude yo ver persona que endereçase mis pies por la carrera de paz, nin me mostrase camino por donde pudiese llegar a poblado de plazerres” (37; “Long ago, virtuous lady, the cloud of temporal and human sadness covered the borders of my life and with a thick whirlwind of anguished sufferings carried me off to an island called ‘Oprobrium hominum et abiecio plebis’ where I have lived for so many years – if life this can be called – without ever seeing anyone to direct my steps onto the road of peace or show me a path whereby I could arrive to any community of pleasures”; 23). The name of the island is derived from Psalm 21:7: “ego autem sum vermis et non homo obprobrium hominum et dispectio plebis” (“But I am a worm, not a man: the scorn of mankind, and the outcast of the people”).¹⁵

The nature imagery in this opening phrase – specifically, the cloud and thick whirlwind – are usually used in a negative context as metaphors for dark and destructive forces. Teresa states that, when she was struck deaf, she lived in darkness and was forcibly sent to an island where she feels bereft, alone, and unwanted.

13 Seidenspinner-Núñez, *The Writings* (see note 2), 24, notes the similarities of some of Teresa’s imagery and that used by Pedro de Luna in his *Libro de las consolaciones humanas*. For example, he uses garden imagery as a metaphor for the pleasures of religion. He, too, like Teresa counsels consulting good books for solace. For the literary topic of islands, see Albrecht Classen, “Caught on an Island: Geographic and Spiritual Isolation in Medieval German Courtly Literature: *Herzog Ernst*, *Gregorius*, *Tristan*, and *Partonopier und Meliur*,” *Studia Neophilologica* 79 (2007): 69–80.

14 Seidenspinner-Núñez, *The Writings* (see note 2), 12.

15 Seidenspinner-Núñez, *The Writings* (see note 2), 23.

She next describes her life on this metaphorical island as “exillyo e tenebroso destierro, más sepultada que morada . . .” (37; “exile and shadowy banishment, feeling more in a sepulcher than a dwelling . . .,” 23). The idea of gloom, here the deepest darkness of the grave, is invoked to make her island exile appear bleaker still. Victoria Rivera-Cordero comments on this passage of the *Arboleda* stating that “The author perceives the state of deafness as a tomblike space that she has been forced to enter”¹⁶ Standard dictionaries of symbols identify the island as a place of isolation, solitude, and even death.¹⁷ But Teresa effects a metaphorical sleight of hand, and turns this initially depressing island into a place of consolation and gratitude. She explains that the initial reaction to the onset of her deafness – that of loneliness and rejection – changed when she realized that God had given her this impairment for a higher purpose. The darkness in which she was living was, literally and metaphorically, illuminated by the grace of God. Teresa explains: “E con esta Luz verdadera que alunbra a todo omne que viene en este mundo alunbrado mi entendimiento, desbaratada la niebla de mi pesada e tristeza, vi esta ýnsula ya dicha ser buena e saludable morada para mí” (38; “And with my understanding enlightened and the cloud of my heavy sadness dispelled by this true Light that illuminates everyone who comes into this world, I saw that this island, indeed, was a good and healthful dwelling place for me”; 24). Rivera-Cordero comments on this passage, explaining that “the exile or death imposed by the external and discriminatory discourse of illness is transformed by Cartagena into a healthy space where she can develop her interiority as a writer and receive divine grace as a believer.”¹⁸

The Grove or *Arboleda*

This about-face, brought on by a spiritual awakening, is dramatic and serves as a point of departure for Teresa to develop her central metaphor – the *Grove*, or *Arboleda* – that serves as the title for her work. The island, however, does not lose all negative connotation because it is still a lonely place since “poblar de vezinos

16 Victoria Rivera-Cordero, “Spatializing Illness: Embodied Discourse in Teresa de Cartagena’s *Arboleda de los enfermos*,” *La Corónica* 37.2 (2009): 61–77; here 69.

17 For example, José Antonio Pérez-Rioja states that an island is symbolically associated with isolation, solitude, and death. For example, in Greek mythology Calypso imprisons Odysseus on her island for seven years, isolating him from his companions and his family. *Diccionario de símbolos y mitos* (Madrid: Tecnos, 1971), 251.

18 Rivera-Cordero, “Spatializing Illness” (see note 16), 71.

no se puede, porque pocos o ningunos hallarés que de su grado en ella quieren morar, ca es estérile de plazerres tenporales, e muy seca de glorias vanas, e la fuente de los honores humanos tiene muy lexos en verdat . . .” (38; “you will find few people or none willing to dwell here since it is so sterile of temporal pleasures and dry of vainglories and the fount of human honors is far away indeed . . .”; 24). The words sterile and dry, usually used to describe a hostile and infertile natural environment, are invoked here as part of Teresa’s extended metaphor about distancing herself from what are usually considered the pleasures and rewards of life. These worldly pursuits are unavailable to her as she dwells on her island that basks in the light of celestial illumination. Although she is alone on her island home, she is surrounded by “arboledas de buenos consejos y espirituales consolaciones” (38; “groves of good counsel and spiritual consolation”; 24). Although she has no one with whom to speak, the trees on the island nonetheless give her good advice.¹⁹ This almost pantheistic view of the grove of trees extends the nature metaphors with which Teresa began her treatise. The good counsel she receives from the trees is what consoles her and she wishes to share their encouragements so that other sufferers may also find consolation and relief.

Teresa receives advice and comfort amongst the trees of her island precisely because her ears are deaf to the distracting sounds of the world and, by extension, to the words uttered by other human beings. She declares that even shouting in her deaf ears will prove ineffectual. She receives good counsel from graftings from the trees in her grove: “de arboledas saludables tienen en sí maruillosos enxertos” (38; “wondrous graftings from healthful groves”; 24).²⁰ These graftings are her devotional books, especially the Psalms.²¹ She receives consolation and counsel from her

19 For an ecocritical analysis of trees, see Chapter 2 of Gillian Rudd’s *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester and New York: Manchester University Press, 2007), and Albrecht Classen’s *The Forest in Medieval German Literature: Ecocritical Readings from a Historical Perspective*, Ecocritical Theory and Practice Series (Lanham, Boulder, New York, and London: Lexington Books, 2015).

20 For a discussion of literary implications for graftings, see Rudd, *Greenery* (see note 19), 75–77.

21 Although Teresa’s trees are metaphorical, there is a direct connection to real trees and the procedure of grafting. Teresa finds consolation only after twenty years of reading and praying about her situation. Her trees are mature, horticulturally ready for taking graftings. So, even though the trees here serve a symbolic purpose, they also reflect real knowledge of the natural world which thus makes the use of the tree image accessible to an audience familiar with foresting techniques. On the point of tree maturity, Rudd affirms: “It is not always advisable to take cuttings from saplings that are too young . . . Once they are established and fruiting . . . scions have good chance of taking, while the original tree is strong enough to bear having such cuttings taken without causing it problems,” Rudd, *Greenery* (see note 19, 77). Teresa’s trees are mature in the sense that she has spent many years with them before beginning to pen *Arboleda*.

readings, so much so that she is comforted. Again, the motif of the grove of trees is used to express this new feeling of contentment. The grove now provides her body with shade and a gentle breeze alleviates her troubled soul: “poblaré mi soledad de arboleda graciosa, so la sonbra de la qual pueda descanssr mi persona y reçiba mi espíritu ayre de salud” (38: “I would fill my solitude with a gracious grove under whose shade my body could rest and my spirit receive a healthful breeze”; 24).²² Although she admits that the trees and graftings from them are of great benefit, her loneliness remains. But solitude begins to take on positive characteristics as Teresa develops her arguments. She reiterates that the solitude imposed on her by deafness separates her from worldly distractions and she calls it “soledad amable, soledad bienaventurada, soledad que me haze ser sola de peligrosos males e acompañada de seguros bienes, soledad que me aparta de cosas enpeçibles e dañosas al ánima e avn al curpo no muy prouechosas” (40; “a kind solitude, a blessed solitude, a solitude that isolates me from dangerous sins and surrounds me with sure blessings, a solitude that removes me from things harmful and dangerous to both my body and soul”; 26). Deborah Ellis, on this point, asserts that Teresa “interprets her isolation as spiritual company, transforming isolation from people into inclusion among the saved.”²³ Rivera-Cordero notes that Teresa uses the same metaphorical language with which she began her treatise to here make her disability “a source of empowerment.”²⁴ She sees her deafness as literally a gift from God by which he silenced her ears to what she calls “worldly chatter” (26). By only listening with her soul to the voice of God, Teresa is not distracted by the world or led into temptations that interacting with others might provoke.

The graftings from her grove of trees on the island are, first and foremost, Biblical passages that she examines in depth, mining them for both literal and allegorical meanings. As Ronald Surtz contends, Teresa builds many of her arguments around two passages from the Psalms – Psalm 44:11 and Psalm 31:9. Psalm 44:11 reads “audi filia et vide et inclina aurem tuam et obliviscere populi tui et domus patris tui” (“Hearken, O daughter, and see, and incline thy ear: and forget thy people and thy father’s house”). The house that she abandons is sinfulness

22 For the possible influence of Kabbalah on Teresa’s imagery, see Mary Baldridge, “The Tree as Unifying Element in the Works of Teresa de Cartagena,” *Cuaderno internacional de estudios humanísticos y literatura* 7 (2007): 55–72. Teresa’s grandfather, Pablo de Santa María, had been an important rabbi in Burgos before his conversion to Christianity and his subsequent appointment as bishop in Burgos. He was a great proponent of using elements of Kabbalah as a tool to convert Jews to Christianity. Owing to Teresa’s excellent education and access to her family’s library, she probably knew some of the Kabbalistic texts that circulated widely amongst Castilian Jews.

23 Deborah Ellis, “Unifying Imagery in the Works of Teresa de Cartagena: Home of the Dispossessed,” *Journal of Hispanic Philology* 17.1 (1992): 43–53; here 45.

24 Rivera-Cordero “Spatializing Illness” (see note 16), 69.

and the people she separates herself from are earthly desires.²⁵ Psalm 31:9 states “nolite fieri sicut equus et mulus quibus non est intelligentia in camo et freno maxillas eorum constringe qui non accedunt ad te” (“Do not become like the horse and the mule, who have no understanding. With bit and bridle bind fast their jaws, who come not near unto thee”). For this verse, Teresa develops the idea of the bit of the horse or mule as one’s reason and the bridle as temperance which constrains the jaws that she equates to vain desires.²⁶ The choice of a Psalm that involves animals is a significant choice. She contrasts wild animals with domesticated ones using the bit and bridle as symbols of taming. While at first glance the need to subject the wild beasts, literally, harness them for service to humans might seem openly anthropocentric, Teresa actually identifies as a fellow creature of God. Just as a bit and bridle are needed so that a horse or mule may be guided so, too, all “animal razonable” (47; “rational animals”; 33) need guidance. And guidance is provided by the ability to reason (bit), combined with the virtues of temperance (bridle) and discretion.²⁷ She speaks of herself as an animal in need of God’s firm hand: “Digo e afirmo que por mi grand bien y manifiesto prouecho, el Señor soberano con cabestro y freno de dolencia e pasyones contriñó las mexillas de mis vanidades” (49; “I say and affirm that with bit and bridle my sovereign Lord constrained the jaws of my vanities to benefit my spiritual well-being”; 34). Furthermore, she proclaims that infirmity or disability is the best bridle to humble the haughty and the best bit to suppress desires harmful to the soul.

Teresa’s elaborations on the Psalms follows in the tradition of scholastic exegesis which emerged in the twelfth century. Since we know that Teresa received an excellent education, we may safely assume that she knew at least Peter Lombard’s *Magna glossatura* since it was the most frequented cited and studied in theological schools.²⁸ She follows Peter’s avowed intent to teach readers how to behave well in order to obtain eternal life.²⁹ Specifically, as a cloistered nun herself, glossing of Psalm 44 is relevant since this particular Psalm was sung during the liturgy for the induction of women to monastic life.³⁰ The bit and bridle are

25 Surtz, *Writing Women* (see note 12), 23.

26 Surtz, *Writing Women* (see note 12), 23.

27 Teresa is participating in the centuries-long tradition of exegesis on the Psalms.

28 The *Magna glossatura* contains Lombard’s glosses on the Psalms as well as the Pauline Epistles. Marcia L. Colish, “*Psalterium Scholasticorum*: Peter Lombard and the Emergence of Scholastic Psalms Exegesis,” *Speculum* 67 (1992): 531–48; here 352.

29 Colish, “*Psalterium Scholasticorum*” (see note 28), 539.

30 Colish, “*Psalterium Scholasticorum*” (see note 28), 535.

not only tools that God has used to ensure her inability to hear and her choice not to speak but also symbols for the discipline of convent life in general.

Teresa then returns to her central theme – her own suffering and her impairment as instruments employed by God to lead her away from sin. She openly admits that she willfully wants to be able to hear but her deafness does not allow it; thus, it follows that the intention of her suffering is preferable to her own desires. Her suffering “me quiere salvar e yo me quiero perder, ella me quiere arrear de peligros, e yo me quiero lançar en ellos” (50; “wants my salvation, and I want my perdition; it wants to withdraw me from dangers, and I want to cast myself into them”; 35). After these confessions, Teresa returns to the bit and bridle imagery of the Psalm, proclaiming that the constraints of the bit and bridle, while sources of physical pain, were necessary since without them she would not have been led to God and away from her own desires (35). She further states that God gives us bodily afflictions, not as punishment for sin, but rather they are given to us with love and mercy to draw us near to Him (36).³¹

The Convent Metaphor

Teresa moves on to another metaphor – that of the convent – to explain further not only her isolation but also the idea of being enclosed in her state of deafness. This choice is not unexpected since she lived in a cloistered convent, but her adaptation of the realities as well as the symbolic associations of convent life to rationalize her experience of impairment have unique features. Her first reference to convent imagery occurs early in the text when she speaks of God willing her to go deaf; she says that God placed cloisters on her hearing (28). In this way she perceives her loss of hearing as a removal from the world outside the convent, placing her both figuratively and literally in an intimate, enclosed space. Later in *Arboleda* she invites all who suffer to join with her so that they can come to know that their afflictions have a greater purpose, that they are sent by God to teach us the virtue of patience and to gently chastise us so that we do not wander from the path that leads to salvation. She again uses the metaphor of the convent when she invites all those who are ill or impaired to join her in what she calls the “convent of afflictions” (42). Surtz has studied image patterns in Teresa’s work and, when addressing her use of the convent as metaphor, states that “Teresa’s sense

31 “con cuánto amor, con cuánto misericordia se nos dan estas aflições e pasiones corporales, no tanto por nuestros pecados, que lo bien merescen, como porque nos alleguemos a Dios, que es nuestro soberano Bien” (52).

of community with the suffering is expressed in a reference to ‘los enfermos con quien tengo hecha carta de hermandad’” (“the sick with whom I have signed a pledge of sisterhood”; 45).³² The reference to sisterhood here implies a kind of religious order of the infirm or impaired who inhabit the same convent space. Surtz calls Teresa’s allusions to a convent “a prime example of how . . . biographical features such as conventual life and deafness are made to function on both a literal and figurative level.”³³

Teresa further develops the convent metaphor by proclaiming Patience to be the abbess who should rule over those who are cloistered away due to disability: “si ésta (paçiençia) no rige y manda el convent de los dolientes, todas nuestras dolençias y nuestro trabajo quedarán syn fruto” (63; “if Patience does not rule and order the convent of the suffering, all our afflictions and our travail would be fruitless”; 47). She calls Patience a good abbess to whom the suffering profess “to live in observance of the virtues that our spiritual advantage requires” (48). There appears to be a bit of a double meaning here. The English translation of the Spanish text – “no podríamos abenir en la oseruançia de virtudes que nuestro prouecho espiritual se require” (64) – is completely accurate, but, in both languages, does she mean that observance of virtues is the surest way to secure spiritual advantage, or, does she imply that the afflicted living in this convent of the impaired, under the guidance of the good abbess, Patience, actually enjoy a spiritual advantage over the fully-abled?

Given Teresa’s talent for creating and manipulating imagery, a talent that Alan Deyermond labeled “rich and varied,” double-entendre was certainly not beyond her.³⁴ Deyermond further commented that “Teresa was determined to show at the outset that she was capable of stylistic virtuosity if she chose to us it.”³⁵ She develops the metaphor of Patience as the abbess of the convent with an etymological explanation of the word itself: “¿Y qué es paçiençia syno sofrir con prudençia, segunt lo declaran sus mesmas letras diciendo ‘paçiençia’? Aquestas primeras que dicen ‘paz’, demuestran passion o padescer, y las syente postrimers que dizen ‘çiençia’, ya uedes lo declara asý, que paçiençia no es ál, sino padescer con pruedençia” (64; “For what is patience if not to suffer with prudence, as its very name – *paçiençia* – declares? These first letters that spell *paz* (peace) denote suf-

32 Ronald E. Surtz, “Image Patterns in Teresa de Cartagena’s *Arboleda de los enfermos*,” *La Chispa* ’87: *Selected Proceedings*, ed. Gilbert Paolini (New Orleans, LA: Tulane University, 1987), 297–304; here 300.

33 Surtz, “Image Patterns” (see note 32), 300.

34 Alan Deyermond, “‘El convento de dolençias’: The Works of Teresa de Cartagena,” *Journal of Hispanic Philology* 1.1 (1976): 19–29; here 22.

35 Deyermond, “El convento” (see note 34), 22.

fering (*pasión*) or endurance (*padesçer*) and the last seven letters that spell *çiençia* (wisdom) thus demonstrate to us that patience is nothing else but to suffer with prudence"; 48). According to Mary Baldrige, Teresa's division of the word into three parts may reflect a Kabbalistic technique that was used by Christians to proselytize to Jews, specifically with regard to an imitation of the trilogy. Specifically, she points out Teresa's technique in relation to the *sefirot*, the ten principles through which human beings can approach God. In Baldrige's reading of Teresa's text, the title image of the *arboleda* or grove of trees is related to *sefirot* since its ten principles are usually represented "in the form of a tree with the top three seen as engenderers of the seven lower ones. When Christians began to use Kabbalistic elements to 'prove' the veracity of Christianity, they began to relate the three superior *sefirot* with the Holy Trinity In a similar manner, we see the three uppermost *sefirot* of Teresa's tree – wisdom, suffering, and peace – almost as references to the Father, Son and Holy Spirit."³⁶

Teresa next includes a very lengthy passage on the meaning and benefits of what she calls "perfect patience." She concludes that only by living in a state of perfect patience is one able to obtain paradise. She stresses how much more the impaired have need for the virtue of patience. She asks rhetorically: "Pues, ¿a quién es más menester la paçiençia que a los enfermos y vulnerados de paçiones?" (94; "And who has more need of patience than the infirm and those wounded with suffering?"; 73). Teresa explains that the practice of patience is for one's own benefit, for love of self. She establishes a negative simile for the invalid who lacks patience, likening him/her to a tyrant, but a tyrant that actually inflicts suffering upon him/herself: "Ca por cierto, más cruel es el enfermo syn paçiençia que no los tiranos del tienpo pasado: porque aquéllos martirriavan los cuerpos ajenos y conseruavan los suyos, mas el enfermo ynpaçiente a sí memsmo atormenta, cruçifica y mata"(95; "Surely the invalid without patience is more cruel than tyrants of the past for while the latter martyred the bodies of others and preserved their own, the impatient invalid torments, crucifies, and kills himself"; 73). She emphasizes this idea when she next compares impatience in those who suffer to a "pestilencia mortal que el alma e cuerpo todo lo mata" (95; "mortal pestilence that kills the body and the soul"; 73).

³⁶ Baldrige, "The Tree" (see note 22), 60–61. Baldrige further develops the relationship of Teresa's philosophy with *sefirot*: "After enumerating a very close approximation to a sefirotic trinity in the upper part of her sefirotic tree, Teresa shows how the other seven sefirot can be identified with the four cardinal virtues (prudence, strength, justice and temperance) added to the three theological virtues (faith, hope and love). Just like in a Kabbalistic sefirotic tree, one gains the upper levels of clarity and connection with God by progressing through the seven lower sefirot" (61).

Patience is further allegorized in following pages of *Arboleda*. Besides the abbess of the convent of sufferers, this virtue is called a great doctor, medicine itself, and the “conservadora de las órdenes de los trabajos” (95; “conservator of the order of travails”; 74). She returns here to the idea of a religious order, a convent, now called the “order of travails.” Not only should Patience rule over this order but she also has curative powers since she is both doctor and medicine for the impaired. Teresa introduces yet another metaphor for patience, calling her a discreet and prudent prelate: “amadora del bien de sus adictos, ca non es otro su oficio syno aparejarles camino derecho a paraíso . . .” (100; “beloved by her subjects, for her office is none other than to prepare for them a straight road to heaven . . .”; 78). A prelate, any high-ranking church dignitary, has responsibilities and duties with regard to both the religious and lay people under his or, in this case, her care. Teresa specifically states that the infirm are under the jurisdiction of this prelate Patience and, with such a superior in charge of their order, they are what she calls “blessed invalids” (78).

Teresa’s imagery is one of isolation but also of inclusion. She sees herself not only as a member of a religious order but also as one among the larger order of all who suffer disease or impairment. She opens her treatise with an image that conjures up loneliness and isolation, separation, and inaccessibility – the deserted island. But it is on this island that she finds her grove of consolation, the appreciation of her own physical impairment as a gift from God that smooths her path toward salvation.

After years of struggle, she has come to know the spiritual benefits of her deafness and this is knowledge she needs to share with other sufferers. But she recognizes that all those who are impaired are set apart from the fully-abled in a society. Thus, she has recourse to a second set of images – those of the cloister with the allegorical abbess of Patience as its head. With this group of images, she exploits her own cloistered existence as a nun to paint images that both console and teach the infirm and impaired to rejoice in their separation from others. Just as the cloistered nun lives apart from society so, too, do the disabled live in a different reality. But this reality, Teresa argues, is not negative when one obeys the dictates of the prelate that is Patience. Perfect patience can lead to a greater knowledge of oneself and, more importantly, of one’s relationship to God and the benefits of His grace.

It is worth noting that Teresa does not equate sin with illness as was often the case in religious writings. Rivera-Cordero points out that, by contrast, in *Arboleda* Teresa links sin to physical health (in this case to being able to hear) “be-

cause such a state brings one closer to the sinful world of vanities.”³⁷ By scorning worldly concerns – whether on the metaphorical island or in the convent – she proclaims, the infirm can find spiritual joy even though the world rejects them. Teresa specifically points to a kind of imposed humility which the disabled endure due to the contempt that others feel toward them. She even goes so far as to suggest that the scorn of others leads to a kind of self-scorn which engenders true humility: “Ca el fundamento de la verdadera humilldad yo creo que es despreciar onbre a sí mesmo e tenerse en reputación de mucho menos estima y valor de aquélla que sus despreciadores e dezidores le tienen” (89; “For the foundation of true humility, I believe, is for man to despise himself more and esteem and value himself less than his detractors do”; 69). While at first glance, this declaration of self-deprecation seems at odd with Teresa’s notions of the spiritual superiority of the disabled, her assertion is actually part of what Encarnación Juárez calls “her journey toward a final resolution through her body in pain . . . to subdue her soul and gain insight.”³⁸ Although she refuses to speak, Teresa’s consoling voice comes through loud and clear in *Arboleda*. She personally experienced an isolating disability, she suffered mightily from her condition, but she wants others to know what she has learned, and what she has gained, from hearing loss. Hers is a triumph over an impaired body by means of an enlightened mind that begets an enlightened soul.

Admiración operum Dey

Teresa’s arguments throughout *Arboleda* are scholarly and complex and go far beyond merely praising suffering as a way to participate in the sufferings of Christ as proposed by other religious writers. Precisely because Teresa’s discussion of her physical impairment and the spiritual journey it engendered is so subtle and sophisticated, her role as the author of *Arboleda* was called into question. Teresa decided to confront those who doubted that she, a disabled woman, could create such a masterful work. To that end she wrote a second text, *Admiración operum Dey* [*Wonder at the Works of God*]. She felt compelled to respond not, I believe, out of any personal vanity or need for recognition but rather to assert a single, and irrefutable truth: God gave her the ability to write *Arboleda* and, since

37 Rivera-Cordero, “Spatializing Illness” (see note 16), 65.

38 Encarnación Juárez, “The Autobiography of the Aching Body in Teresa de Cartagena’s *Arboleda de los enfermos*,” *Disability Studies: Enabling the Humanities*, ed. Sharon L. Snyder, Brenda Jo Brueggemann, and Rosemarie Garland-Thomson (New York: Modern Language Association of America, 2002), 131–43; here 137.

anything is possible for God, to deny her authorship is tantamount to denying the omnipotence of God. She declares that any reader who doubts her authorship does not believe that God is capable of miraculous deeds. She argues that it is rare for women to write but certainly not impossible if God so wills it. She constructs and builds what, on the surface, appears to be a simple, if not outright indisputable, tenet of Christian doctrine, i.e., God's unlimited and inscrutable power.

Although *Admiración* is specifically addressed to Juana de Mendoza, the wife of the poet Gómez Manrique, Teresa speaks directly to the detractors of her authorship of *Arboleda*. She begins by saying that some “prudentes varones e asý mesmo henbras discretas” (113; “prudent men and also discreet women”; 87) have cast doubts upon her claims to authorship. It is not only men who question her ability to write but even some women. So, from the outset, Teresa does not portray herself as a victim of misogyny, rather she says she is genuinely surprised that “vna obra pequena, de poca sustancia” (113; “a brief work of little substance”; 87) should have occasioned such a heated debate. In fact, she acknowledges the inferiority of her status as a woman, recognizes her lowly position, and attributes her abilities to God alone: “aquello que a mi entendimiento mugeril se fazia escuro e dificultoso, púdolo fazer claro e ligero Aquél que es verdadera Luz e Sol de justia” (129; “whatever was obscure and difficult for my womanly intellect, He who is the true Light and Sun of justice was able to make clear and easy”; 101). But she bristles at the accusations of plagiarism that some had hurled at her; she asserts that she had no other teacher than God and that she did not translate from others' books, “como algunas personas con maliciosa admiración suelen dezir” (131; “as some people with malicious wonder are wont to say”; 103).

Teresa never shies away from reminding readers of her own physical impairment – her deafness – and in *Admiración* she reiterates one of the central themes of *Arboleda*, i.e., that God had taken away her ability to hear so her soul could become silent to the things of the world and attentive only to the understanding by which He had enlightened her. She calls God the “justo Juez” (137; “just judge”; 108) who wounded her in order to help her on the road to salvation. While her studies obviously prepared her to pen *Arboleda*, and later *Admiración*, she attributes the inspiration and impetus for writing solely to divine providence. Her experience of deafness and what she had learned from living with a disability certainly inspired Teresa to write *Arboleda*, and when it came time to defend her literary creation, she takes umbrage with anyone who would question God's power to grant her the ability to write, and to write well and convincingly. Teresa

found the questioning of her authorship “insulting.”³⁹ She even mocks her adversaries, quoting them directly: “se ayan maravillado los prudentes varones del tractado que yo hize, y no porque en él se contenga cosa muy buena ni digna de admiración, mas porque mi propio ser e justo mereçimiento con la adversa fortuna e acresçentadas pasyones dan bozes contra mí e llaman a todos que se maravillan diziendo: ‘¿Cómo en persona que tantos males asyentan puede aver algund bien?’” (113; “prudent men have marvelled at the treatise I wrote, not because there was anything very good or worthy of wonder in it, but because of me and my justly deserved adversities and increased suffering; they cry out against me and call upon everyone to marvel, saying, ‘How can there be any good in a person afflicted with so many misfortunes?’”; 88).

Corteza/meollo Metaphor

Teresa does not claim equality with men and she, in fact, maintains that men and women are inherently different and have different, appropriate roles in life. Luis Miguel Vicente García discusses Teresa’s argument that men are physically stronger and braver than women and concludes that she is not acknowledging male superiority but rather she argues for a sense of balance necessary for the survival of humanity.⁴⁰ As in *Arboleda* part of the arguments in *Admiración* are based on imagery from the natural world. Teresa uses the metaphor of the *corteza* (bark) and the *meollo* (medulla or pith) of a tree; men are the tough bark that protects women who are the tender inner workings of the plant. Both are necessary for the tree to survive and bear fruit and so, too, are men’s and women’s differences necessary for the human race to prosper. Teresa’s readers would have been familiar with the bark/pith metaphor, sometimes expressed in terms of the shell and the meat of a nut.⁴¹ John Moore traces the metaphor to the twelfth century and Adam von Sankt

³⁹ Deyermund, “El convento” (see note 34), 24.

⁴⁰ Luis Miguel Vicente García, “La defensa de la mujer como intelectual en Teresa de Cartagena y Sor Juana Inés de la Cruz,” *Mester* 18.2 (1989): 95–103; here 98.

⁴¹ See for example, Gonzalo de Berceo’s use of the *corteza/meollo* motif in the introduction to the *Milagros de Nuestra Señora* in strophe sixteen after his extended metaphor of the meadow and its delights: “Señores e amigos, lo que dicho avemos / palabra es oscurua, esponerla queremos; / tolgame la corteza, al meollo entremos, / prendamos lo de dentro, lo de fuera dessemos.” Gonzalo de Berceo, *Obra completa*, ed. Brian Dutton, et.al. (Madrid: Espasa Calpe, 1992), 565.

(Gentle people and friends, what we have just said / is an obscure parable and we wish to explain it. / Let us remove the husk and get into the marrow, / let us take what is within, and what is without, let us leave aside). *The Collected Works of Gonzalo de Berceo in English Transla-*

Victor's coining of the phrase *Nux est Christus* in which he likens the meat of the nut to Christ's divinity and the nut's shell to His human body.⁴² As with the *corteza/meollo* metaphor, where both are needed for the tree to exist and thrive, both Christ's divinity and his coming to earth in a human body were necessary elements in the plan for salvation. By extension, the metaphor also came to equate *corteza* or shell with superficial understanding of spiritual truths while the *meollo* or meat was related to deep emotional and intellectual appreciation of these concepts.

Teresa's use of this rhetorical motif deserves a closer look to appreciate her subtle manipulation of a well-known image appropriated from nature. *Corteza* in the metaphor commonly stood for superficiality and the corporal, traditionally associated with women, whereas the *meollo* meant the deep meaning and the spiritual, usually only accessible to the keen intellect of men. She actually reverses the usual meaning of the *corteza/meollo* metaphor. In his article, "Conventional Botany or Unorthodox Organics?," Moore asserts that "Teresa inverts the traditional patristic model by associating males with the deceptive surface-level reality of *corteza*, which recalls images of the body and which is normally associated with woman. She then aligns females with the sacrosanct interior space of *meollo*, which was a realm reserved for the masculine soul and which stood for true and hidden meaning."⁴³ If Teresa associates men with the rough surface surrounding the softer female tissues inside, then it is actually women who possess what Moore calls "legitimate intelligence."⁴⁴ Moore traces the use of the word *meollo*, beginning with *El Libro de Alexandre* in which *meollo* is equated to *seso*, or good sense or judgment. Alfonso X, in the *Siete Partidas* declares that *seso* re-

tion, ed. Jaennie K. Bartha, Annette Grant Cash, et.al. *Medieval and Renaissance Texts and Studies*, 327 (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 2008), 15. Juan Ruiz uses other variations on the *corteza/meollo* metaphor in strophe 17 of the *Libro de buen amor*: "El axenuz de fuera más negro es que caldera; / es de dentro muy blanco, más que la peña vera; / blanca farina está so negra cobertera; / açucar dulce e blanco está en vil caña vera." Juan Ruiz, Arcipreste de Hita, *Libro de buen amor*, ed. G. B. Gybbon-Monypenny. Clásicos Castalia 161 (Madrid: Clásicos Castalia, 1988), 113:

"The fennel seed outside is blacker than old cook-pots on chains, / But on the inside whiter still than ermine's winter mane. / White flour lies hid within the black case of the wheat's dry grain; / And sugar, sweet and white, hides in the humble sugarcane." Juan Ruiz, Arcipreste de Hita, *The Book of True Love*, trans. Saralyn R. Daly (University Park, PA: The Pennsylvania State University Press, 1978), 31.

42 John K. Moore, Jr. "Conventional Botany or Unorthodox Organics? On the *meollo/corteza* Metaphor in *Admiración operum Dey* of Teresa de Cartagena," *Romance Notes* 44.1 (2003): 3–12; here 6.

43 Moore, "Conventional Botany" (see note 42), 7.

44 Moore, "Conventional Botany" (see note 42), 9.

sides in the *meollo de la cabeça* [pith of the brain].⁴⁵ Also, this same critic argues that from a purely botanical standpoint, the *meollo* of many plants is considered to be the edible, and therefore preferable part.⁴⁶

While Moore and Siedenspinner-Núñez clearly assert that Teresa's use of the *corteza/meollo* metaphor is subversive with regard to patristic teaching about woman's inferior intellectual status,⁴⁷ Surtz sees her arguments not so much as the case of one gender being inferior or superior but rather that Teresa sees both the *corteza* and the *meollo* as essential and co-dependent parts.⁴⁸ Moore concludes, with regard to Teresa's particular manipulation of the *corteza/meollo* metaphor: "By linking women with the extra-textual meanings of *meollo*, Teresa's cause of justifying her ability to write and be a godly woman of intelligence is furthered, whether or not she intended that to be the case."⁴⁹

Teresa further expands on the use of this metaphor by equating the strong outer bark of the tree with men's strength and courage which defends weak women, who are enclosed inside their houses, far from the "the rigors and dangers inherent in government and defence . . . where they help by devoting themselves to domestic tasks."⁵⁰ By using the *corteza/meollo* metaphor to assert that women's proper place is in the home and not in public spaces rightly occupied by men, she averts any accusation that she is advocating for women's participation in activities or spaces traditionally within the purview of men. Teresa contrasts the "muger andariega" ["woman who gads about"] with the "muger ynclusa" ["woman who stays home"].⁵¹ I quote the pertinent passage as an example of how Teresa advocates for women's enclosure as part of God's plan for the good of the species:

algunas mugeres comunes . . . salen de su casa amenudo e andan vagando por casa ajenas, las quales, por esta mala contunbre, se fazen asý niligentes e perezosas en el exerçio fimíneo e obras domésticas y caseril, que ellas por esto no valen más e su hazienda e casa valen

45 Moore, "Conventional Botany" (see note 42), 9.

46 Moore, "Conventional Botany" (see note 42), 8–9.

47 Moore, "Conventional Botany" (see note 42), 7. Dayle Seidenspinner-Núñez, "‘Él solo me leyó’: Gendered Hermeneutics and Subversive Poetics in *Admiración operum Dey*," *Medievalia* 15 (1993): 14–23; here 20.

48 Surtz, *Writing Women* (see note 12), 28. He summarizes by stating that "the bark is not more important than the pith nor is the pith more important than the bark" (28).

49 Moore, "Conventional Botany" (see note 42), 11.

50 Surtz, *Writing Women* (see note 12), 26.

51 See the chart contrasting the attributes of these two types of women in Rocío Quispe, "El espacio medieval femenino entre la escritura y el silencio: *Admiración operum Dey* de Teresa de Cartagena," *Lexis* 19.1 (1995): 85–101; here 96.

menos . . . las henbras estando incluidas dentro de las puertas de su casa se exerçen en sus propios e onestos ofiçios . . . (138)

[some common women . . . frequently leave their houses and go wandering through the houses of other people; because of this bad custom, they become negligent and lazy in womanly duties and domestic and household chores, and they do not benefit from this habit; rather, their household and home suffer . . . women enclosed within the doors of their home exercise their proper and honest duties . . .] (109)

Teresa concludes these observations about woman's proper place with a long discussion of the three faculties of the soul – understanding, memory, and will. She says that the woman who gads about has her understanding focused primarily on things of the world, whereas the woman who stays at home can concentrate on spiritual matters and thus exercise wisely the faculty of understanding. However, as Rocío Quispe points out, whereas Teresa obviously values spiritual understanding as superior to concern with worldly matters, she does not negate the power of women to possess the faculty of understanding: “Bueno o malo, lo que observamos aquí es que Teresa hace equivalentes mujer y entendimiento. Al mismo tiempo que los prejuicios de su época se hacen presentes (al hablar de la ‘mujer andariega’), el sujeto desbarata aquél según el cual no puede haber entendimiento en la mujer”⁵² (“Good or bad, what we observe here is that Teresa establishes an equivalency between woman and understanding. At a time when the prejudices of her era are ever present (speaking of the ‘woman who gads about’), the subject disrupts the idea that women lack the faculty of understanding”).⁵³ Quispe adds that, not only does Teresa attribute understanding to women but indicates that the “good woman” – she who stays at home and tends to domestic obligations – possesses superior, spiritual understanding to those who are always in the public spaces, most frequently occupied by men.⁵⁴

With her extended discussion of women and the power of understanding, Teresa gets into some gentle jibes on male superiority. Even though she contends that women should stay out of the public sphere, they actually possess a superior kind of understanding to those who participate in more worldly matters, i.e., men. In a similar vein, Seidenspinner-Núñez notes that Teresa uses the biblical

⁵² Quispe, “El espacio” (see note 51), 96.

⁵³ My translation.

⁵⁴ Quispe, “El espacio” (see note 51), 96. Quispe further states that “La monja castellana escribe acerca de su espacio y lo valoriza feminizándolo en su discurso. Se trata del espacio de la ‘cogitación’ y del ‘estudio espiritual’ y no solo de la contemplación pasiva sino de la reflexión activa que lleva a la producción intelectual” (97; “The Castilian nun writes about her space and gives it value by feminizing it in her discourse. It is a space for ‘thinking’ and ‘spiritual study’ not only for passive contemplation, but for active reflection that leads to intellectual production”).

story of woman being created as a helpmate to man to question whether true strength lies in the one in need of help, i.e., man, or in the helper, i.e., women.⁵⁵ Teresa argues:

De ser la hembra ayudadora del varón, leémoslo en el Génesys, que después que Dios ovo formado del onbre del limo de la tierra e ovo yspirado en él espíritu de vida, dixo: “No es bueno que sea el onbre solo; hagásmole adjutorio semejante a él.” E bien se podría aquí arguer cuál es de mayor vigor, el ayudado o el ayudador: ya vedes lo que a esto responde la razón. (118)

[We read in Genesis how woman is the helpmate of man, for after God had formed man from the mud of the earth and had breathed in him the spirit of life, He said, “It is not good for man to be alone: let us make him a help like unto himself.”⁵⁶ And one could well argue here whether the helped or the helper has the greater strength, and you clearly see what reason would respond.] (92)

But Teresa never openly argues for female superiority or even equality with men. In fact, she speaks of men’s preeminence in terms of physical strength and valor which makes them most suited to rule, govern, and defend the land. In contrast she says women are not suited to such tasks because they are weak and timid, but nonetheless contribute to the greater good with their domestic labors. Both gender roles are necessary as she asserts:

Asý qu’estas priminençias ya dichas de los varones, ser valientes e de grand ánimo e suficiente entendimiento, ni otra alguna Dios les aya dado non es en perxuyzio de las henbras, ni la flaqueza e pusilanimidad del estado fimineo le ortoga por eso, mayor eçelencia al varón. Mas estas contraridades son vna maravillosa dispusyçión que la muy alta sabiduría de Dios hordenó. (118)

[Thus, neither these pre-eminences of men – to be brave and of great spirit and sufficient understanding – nor any other that God may have given them is to the detriment of women, nor likewise does the weakness and timidity of the female condition confer greater excellence to the male. Rather these opposites are a marvelous arrangement ordered by God’s great wisdom.] (92)

55 Seidenspinner-Núñez, “‘Él solo me leyó’” (see note 47), 18.

56 Genesis 2:18.

Conclusion

In both her works – *Arboleda de los enfermos* and *Admiración operum Dey* – Teresa employs a rich mixture of Biblical exegesis, authoritative theological texts, scholastic argumentation, and rhetorical devices to write her consolatory work and the subsequent treatise defending her authorship of the first. Among the rhetorical devices are extensive metaphors based on elements from the natural world. In *Arboleda* she likens her deafness to living on an island, a land mass isolated from others. As a disabled woman, she lives in a liminal domain, as part of a convent society but not a full participant in that community. Teresa uses an image of a remote island, separated from others but, at the same time, shared by others who suffer infirmity or impairment. For it is on this metaphorical island, that she finds the grove of the work's title. From the trees she grafts consolatory insights she has gained from her readings, meditations, and prayers. When called upon to defend her authorship of *Arboleda*, Teresa again has recourse to metaphors based in the realities of the natural world. In *Admiración*, she uses the familiar bark/pith (shell/nut) image not only to defend her God-given ability to write in a convincing and theologically rigorous way but also to subtly hint that perhaps the soft inner part of this pairing is actually the superior one. If men are the hard, outside shell or bark they are present to protect the inner nut or pith, but it is the latter part of the pair that is actually of more value.

This subtle argument actually upends a frequently-used motif and shows just how clever Teresa could be in her arguments. As an erudite author who had suffered, found solace in that suffering, and now desires to share what she has learned with fellow sufferers, she incorporates metaphors from the natural world that are not original to her but she uses them in ways that are, at once, familiar and unique. The clever and even sly ways in which she works them into her arguments contribute to the artistic success of her two treatises. Teresa was a learned woman, defined, in part, by her physical impairment but whose intellect and faith led her to share spiritual insights and to defend those insights when her authorship was called into question.

Nurit Golan

Nature, Art, and Human Perception in Giulio Romano's Room of the Giants at the Palazzo del Te, Mantua (1532–1535)

Abstract: The *Camera dei Giganti* in *Palazzo del Te* in Mantua was painted between the years 1530 and 1533 by Giulio Romano (1499–1546), court artist to the Mantuan Duke Federico II Gonzaga (1500–1540).¹ In a cavernous room, Romano's rendition of fire, a volcanic eruption, an earthquake, and fallen bodies of giants dressed as Roman soldiers created a uniquely stress-laden and highly emotional experience for the duke's guests in this space. During their initial examination, the beholders must have felt as if they were among the victims of nature's forces, about to be smashed by the mountains and collapsing building; but they could soon realize that this was a trick of paint, a jest to be enjoyed. This effect was created by Romano's use of illusionism and *tromp l'oeil* techniques. I contend that the room was created for more, however, than a brief amusement for the duke's guests, as prior research has widely held. In contrast, I argue that Romano crafted this Mannerist immersive experience in order to deceive the beholder through his highly illusionistic style and to create a sense of vagueness that expressed his philosophical ideas about the human perception of the world. Romano follows Plato in asserting that the senses, in particular sight, do not allow us to grasp the objective truth, be it nature or nature's mimesis in art. The deceptive senses are actually subject to our habits and emotions. I argue that the jest Romano created leads to moral self-examination and self-awareness. As such it was a trigger for the philosophical symposia held in the palace as part of the entertainment offered by the lord to his intellectual guests. These symposia were then an intellectual continuation of the pleasure first offered to the senses in the room.

Keywords: Giulio Romano, Room of the Giants in Mantua, Federico II Gonzaga, Baldassare Castiglione's *Book of the Courtier*, Mannerism, Renaissance humanism and Platonism, epistemological ideas via art

¹ I wish to thank Dr. Roberta Piccinelli, curator of the Civic Museums of Mantua, for her help.

Therefore, let no one ever imagine seeing a
work from the brush that is more horrible or
frightening or more realistic.
– Giorgio Vasari²

The Camera dei Giganti (Room of the Giants) in Palazzo del Te in Mantua was decorated between the years 1530 and 1533 by Giulio (Pipi) Romano, court artist to the Mantuan Duke Federico II Gonzaga. In the cavernous room, Romano painted fire with billowing smoke, volcanic eruptions, and a violent earthquake that caused palaces to collapse, rocks to tumble, and the bodies of giants to fall or struggle to escape from the vengeance of the gods looking down from above. To be sure, the artist created a uniquely stress inducing and highly emotional space that completely envelopes its viewers.

Through the extreme illusionistic style that Romano employed in his creation of the immersive experience of the room, he sought to entertain the duke's guests, one of the high nobility's key duties.³ Original in both form and content, this room had an initially terrifying effect on the beholders, before becoming amusing once the panic faded and the fraught scene was understood as nothing more than a painting. The bizarre, grotesque, and scary have long been recognized as sources of pleasure.⁴ Giorgio Vasari's (1511–1574) emphasis on the sense of fear Roma-

2 Giorgio Vasari, *Lives of the Most Eminent Painters, Sculptures, and Architects by Giorgio Vasari*, trans. Gaston du Vere (London: Philip Lee Warner, 1912–1914), bk. 6, 143–70; here 160. Also at <https://archive.org/details/livesofmostemine06vasauoft/page/n9/mode/2up?view=theater> (last accessed on September 10, 2023).

3 Renaissance court life has been discussed extensively. The most revealing and influential primary source is the account of the Court of Urbino by Baldassare Castiglione (1478–1529), who served as a courtier in both Urbino and Mantua. Castiglione was a relative of Federico on his mother's side. He was the one who introduced Romano to the duke. See Baldassare Castiglione, *The Book of the Courtier by Count Baldesar Castiglione*, trans. Leonard Eckstein Opdycke (New York: Charles Scribner's Sons, 1901); also at <https://www.gutenberg.org/cache/epub/67799/pg67799-images.html#sec1.50> (last accessed on November 22, 2023). On Castiglione's influence, see Peter Burke, *The Fortunes of the Courtier: The European Reception of Castiglione's Cortegiano* (University Park, PA: Penn State University Press, 1995); JoAnn Cavallo, "Joking Matters: Politics and Dissimulation in Castiglione's Book of the Courtier," *Renaissance Quarterly* 53.2 (2000): 402–24 (see also at <https://www.jstor.org/stable/2901873>); Stephen Kolsky, *Courts and Courtiers in Renaissance Northern Italy*. Variorum Collected Studies Series, 779 (Aldershot, Hampshire: Ashgate Variorum, 2003), 1:331–57, 3:358–80, 6:5–29, 8:34–60.

4 The construction of grottos (human-made caves) that appear old, slightly scary, and in an almost ruined state was a fad in fashionable, elite gardens in the sixteenth century, as found, for example, in the Boboli gardens in Florence. Vasari mentions 'grotto' as a metaphor referring to the room's darkness and cavernous shape.

Editor's note: However, we already hear of a most remarkable grotto, created by giants in ancient times, serving Tristan and Isolde in Gottfried von Strassburg's eponymous courtly ro-

no's work raised in its spectators was understood as the highest possible praise. As Baldassare Castiglione explains in his 1528 *Book of the Courtier*: "What we laugh at is nearly always something incongruous and yet it is not amiss."⁵ The room of Giants illustrates this axiom, but I believe that it provided more than merely brief diversion and shock. Being an artifact of Mannerist style at its finest, it elicited a sense of uncertainty that opened its viewers up to the penetration of philosophical ideas, particularly in regard to human perception and its limitations.

By exploring the reception of this space and delving into the ramifications of what thoughts and emotions Romano's Mannerist work would have provoked in its spectators, I will argue that the Room of the Giants was not only a place for a short-term entertainment via an overwhelming sensual experience, as has been posited by all previous scholars, including Vasari. Instead, I will claim that it was a place conducive to the destabilizing awareness of human fallacy that elicited intellectual discussions about the search for truth among courtiers, allowing them to showcase their wit and erudition.

The Palazzo del Te

Duke Federico II had the Palazzo del Te built on the outskirts of Mantua between 1525 and 1535⁶ (Fig. 1). He claimed in a Latin inscription that runs around the walls of the Room of Psyche that the palace was erected to be a place of rest and pleasure, a respite from his daily troubles.⁷ Many art historians contend that the palace was built as a "lovers' refuge" for Federico II and his mistress, Isabella Boschetti.⁸ This, however, seems to be at most only part of the story. A Renaissance

mance (ca. 1210) as their utopian retreat from King Mark's Cornish court whereby they can enjoy their love in that cave without any disturbance from the social world outside.

5 Castiglione, *Book of the Courtier* (see note 3), 1:8; See also Stephen Kolsky, "Making and Breaking the Rules: Castiglione's *Cortegiano*," *Renaissance Studies* 11.4 (1997): 358–80.

6 For the debate on the precise dates of the execution of the fresco and the painters who assisted Romano, see Fredrick Hartt, *Giulio Romano* (New York: Hacker Art Books, 1981), 1:152.

7 *FEDERICVS GONZAGA II MAR[CHIO] V S[ANCTAE] R[OMANAE] E[CCLIESIAE] ET REIP[UBLICAE] FLOR[ENTINAE] CAPITANVS GENERALIS HONESTO OCIO POST LABORES AD REPARANDAM VIRT[UTEM] QUIETI COSTRVI MANDAVIT* (Mentioning all his titles, the aristocratic ones and those he received as a *condottiere*, Federico states that he "ordered palace built for virtuous leisure after work to restore rest and quite"). See Brian Vickers, "Leisure and Idleness in the Renaissance: The Ambivalence of *Otium*," *Renaissance Studies* 4.2 (1990): 107–54.

8 Egon Verheyen, *The Palazzo del Te in Mantua: Images of Love and Politics* (Baltimore, MD: The John Hopkins University Press, 1977), 7–20. See refutations in Maurizio Bettini, *The Portrait of a Lover*, trans. Laura Gibb (Berkeley, CA: University of California Press, 1990), 210–11; Helen

palace was necessarily a social and cultural environment and an important political asset. After the sack of Rome in 1527 by the troops of Emperor Charles V (1500–1556), Federico enlarged the palace and adjusted it to be suitable for hosting the emperor.⁹ The Palazzo del Te served to present the Gonzaga family in the appropriate courtly manner and to display them as a major and powerful ruling house of an important republic.

The success of this aim is illustrated by Charles V's visit to the palace in 1530. This imperial stay, as well as Charles's later return visits, became an essential part of Federico II's political strategy. Being equipped to host the emperor meant that the palace had to be able to provide a vast range of entertainments, including horse riding, tennis games on the specially designed tennis court (Fig. 2), dances, music, social games, stage performances, and settings for eloquent conversation.¹⁰

As Castiglione's *Book of the Courtier* elucidates, the pursuit of leisure at the courtly palace was serious business, expected both to entertain and to enlighten, all of which helped secure and enhance political power.¹¹ To meet these ends, Ro-

S. Ettlinger, "Visibilis et Invisibilis: The Mistress in Italian Renaissance Court Society," *Renaissance Quarterly* 47.4 (1994): 770–92; Maria F. Maurer, "A Love That Burns: Eroticism, Torment and Identity at the Palazzo Te," *Renaissance Studies* 30.3 (2016): 370–88. For interpretations of various depictions in the palace as hinting at intrigues connected to Federico's mistress and her husband, see Roberta Piccinelli, *I Giganti – The Giants, Palazzo Te* (Milan: Skira, 2021), 24.

9 In May 1527, twenty thousand German and Spanish soldiers took over Rome. The city of 55,000 inhabitants with a defense force of 6,000 soldiers was conquered within few hours. On the sack of Rome, see André Chastel, *Le sac de Rome, 1527, Du Premier Manérisme à la Contre-Réforme* (Paris: Gallimard, 1984); Thomas James Dandeleit, *Spanish Rome, 1500–1700* (New Haven, CT: Yale University Press, 2001), 34–75; Idan Sherer, "A Bloody Carnival? Charles V's Soldiers and the Sack of Rome in 1527," *Renaissance Studies* 34.5 (2020): 784–802.

10 On court entertainment specifically, see Paul Barolsky, *Infinite Jest: Wit and Humor in Renaissance Art* (Columbia, MO: University of Missouri Press, 1978), 7–8, 55–57, 71–74, 77–78, 95–96, 183; Michael Camille, "For our Devotion and Pleasure: The Sexual Objects of Jean du Berry," *Art History* 24.2 (2001): 169–94; Stefen Kolsky, "Theorizing Pleasure in the Renaissance," *Courts and Courtiers in Renaissance North Italy* (see note 3), 33–49. Conversation during the meal was considered healthy and important. See Leon Battista Alberti, *Dinner Pieces*, trans. David Marsh (New York: University of New York at Binghamton, 1987); Michel Jeanneret, *A Feast of Words: Banquets and Table Talk in the Renaissance*, trans. Jeremy Whitely and Emma Hughes (Chicago: Chicago University Press, 1991); John Varriano, *Tastes and Temptations: Food and Art in Renaissance Italy* (Berkeley, CA: University of California Press, 2011), 246–53. On tennis at various contemporary courts see also various contributions to *Pleasure and Leisure in the Middle Ages and Early Modern Age: Cultural-Historical Perspectives on Toys, Games, and Entertainment*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 23 (Berlin and Boston: Walter de Gruyter, 2019), 120, 137, 473–93, 517–518, 524, 529–34, 604.

11 Castiglione presents many of the topics of the symposia held at court of Urbino. His whole book consists of dialogues on various topics, such as art, music, dance, politics, friendship,

mano was employed as the court artist at the palazzo and lavishly outfitted the rooms with paintings, frescoes, stuccowork, tapestries, and even silverware, much of which was inspired by the works of classical authors, such as Ovid, Apuleius, and Plutarch.

Disorientation in the Room of the Giants

The Room of the Giants was a space that disoriented, confused, and overwhelmed as part of its entertainment value. The space of the room itself was designed to shock. Visitors entered by first walking through a luminous loggia. They left behind the bright hall and the palace's other luxurious rooms and found themselves in a dark, round, cavernous space, with a ceiling that seemed to stretch toward an endlessly high cupola, reaching far up into space (Fig. 3). No actual doors or windows appeared in the room since they were camouflaged by the paintings and integrated within the overall decoration.¹² Once inside, the way out was not clear.

What surrounds the beholders can be described as chaos. Mountains and palaces collapse; a volcano erupts. Gigantic figures, dressed as Roman soldiers, are dead or dying, scattered in all directions (Figs. 4, 5). Some are crushed by huge rocks or columns; others drown in the surging water; a few helpless refugees cling to a raft (Fig. 6). Terrifying Furies appear with disheveled hair and snakes in their hands, along with a wild horseman, probably Pluto, grasping a hay fork and driving his carriage borne by wild horses (Fig. 7). Vasari describes the chaotic turmoil well:

In this work, moreover in order to render it more fearsome and terrible, Giulio represented the giants huge and fantastic in aspect, falling to the earth, smitten in various ways by the lightning and thunderbolts, some in the foreground and others in the background, some dead, others wounded, and others again covered by mountains and the ruin of buildings . . . Wherefore let no one ever think to see any work of the brush more horrible and frightening, or more natural than this one . . . and whoever enters that room and sees the win-

women, morals, religion, and the role of the courtier, making the symposia an essential part of the pastime, very similar in a way to the Socratic dialogues. *Book of the Courtier* (see note 3), bks. 1–4. This became a model for imitation in all the European courts; see Burke, *Fortunes of the Courtier* (see note 3); Christine Raffini, *Marsilio Ficino, Pietro Bembo, Baldassare Castiglione: Philosophical, Aesthetic and Political Approaches in Renaissance Platonism*. Renaissance and Baroque, 21 (New York: Peter Lang, 1998), 95–146; and Cavallo, “Joking Matters” (see note 3), 402–24. ¹² Hartt, *Giulio Romano* (see note 6), 1:153. This original experience is very different from that modern visitors have today. The current windows and doors date to the twentieth century.

dows, doors, and other such like things as if it were on the point of falling, and the mountains and building hurtling down, cannot but fear that everything will fall upon him.¹³

Beyond the subject matter, the Room of the Giants is disorienting due to Romano's application of *trompe l'œil* techniques that dissolved the very confines of the room itself. Vasari writes about the dome with Jupiter and the gods around him in minute detail, naming every figure, but he fails to note that the entire cupola with its oculus was not real but merely a painted illusion¹⁴ (Figs. 8, 9). Romano's artistic motivation, according to Vasari, was to deceive the viewer, and he certainly succeeded in that, Vasari himself being the proof of it.

Vasari also failed to realize the real structure of the room: "Under the curve of the vault . . . Giulio had built over that angle a large, round room with extremely thick walls, so that the four corners of the outside walls would be stronger and could support a double vault rounded like an oven."¹⁵ The room, in fact, had regular straight walls and was nearly a cube (measuring $9.81 \times 9.56 \times 10$ meters). Romano's deceptive paintwork tricked even the experienced Vasari into believing that the space was architecturally cycloramic and topped with a very high dome. Decoration that created an illusion of architectural elements, such as columns, or that altered the facts of the room was quite common in the sixteenth century, but Romano took it to an extreme (Fig. 3).

This distortion was magnified by the envelopment of all the walls by Romano's painting. As Vasari's states: "What is marvelous about the work is that the entire painting has neither beginning nor end, and that it is all tied together and runs on continuously without boundary or decoration so that the details near the buildings seem very large, while those in the landscapes recede into infinity. As a result this room, which is no longer than fifteen arms lengths [ca. 10 meters] seems like a place in the countryside."¹⁶ Visitors in the space stand on an uneven floor of large rustic stones that merge with the stones depicted on the fresco's lower edge in a *trompe l'œil* method enhancing the illusion of an inseparable con-

¹³ Vasari, *Lives*, trans. du Vere (see note 1), 160.

¹⁴ It is, of course, possible that Vasari was playing into the illusionism with his statements. In the ducal palace in Mantua, about fifty years earlier (1473), the court artist Andrea Mantegna (1431–1506) had introduced spatial illusionism in the Nuptial Room (*Camera degli Sposi*), painting an oculus on the ceiling and scenes from the life of Ludovico Gonzaga on the walls that were viewed through illusionistic openings.

¹⁵ Giorgio Vasari, *Lives of the Artists*, trans. Julia Conaway Bondanella and Peter Bondanella. Sec. ed. Oxford World's Classics paperback (1991; New York: Oxford University Press, 1998), 370.

¹⁶ Vasari, *Lives*, trans. Bondanella and Bondanella (see note 15), 373.

tinuum of real and imaginary space.¹⁷ The stones, the real and the depicted ones merge and underscore the discrepancy between form and content, between the expectations of the beholders and their final realization that they are in an illusory space.¹⁸

Moreover, the room was dark, lit by a fireplace that likewise negotiated the real room and the painted scene¹⁹ (Fig. 10). Vasari notes its presence and how it works with the imagery: "Through a cleft in the darkness of a grotto, which reveals a scene in the distance executed with fine judgment,²⁰ many giants can be seen in flight . . . And in this spot [on the east, under the volcano] was placed the fireplace for the room which, when a fire is lit, makes it seem as if the giants are burning."²¹ The beholders, losing their balance on the uneven floor of rustic stones and seemingly trapped in the room, become active participants in the unfolding drama, just like the depicted giants.

This sense of inclusion was deepened by the flickering light of the fireplace that would have created vast shadows in the room, animating the otherworldly scene. The shadows of the viewers would have flickered, elongated, and distorted, along the walls, so that the bodies of the beholders would seem to become like

17 The floor was changed in the eighteenth century. Vasari describes in detail Romano's illusionistic achievement with the original floor: "Since the pavement is made of small, round stones set in with a knife, and the lower parts of the walls are painted with the same stones, no sharp angle appears there, and the entire room comes to look as if it were one vast plane," *Lives*, trans. Bondanella and Bondanella (see note 15), 372.

18 Romano employed many methods to create this discrepancy between content and form, in architecture as in art. In architecture, for example, he combined the rustic style of carved stone with the classical Vitruvian order, which was already a standard in Rome. See James S. Ackerman, "The Tuscan Rustic Order: A Study in the Metaphorical Language of Architecture," *Journal of the Society of Architectural Historians* 42.1 (1984): 15–34. Sebastiano Serlio (1475–1554), a painter, theorist, and leading Mannerist architect, mentions that this style became very popular due to Romano's work in Mantua. See Sebastiano Serlio, *Tutte l'opere d'architettura et prospetiva, di Sebastiano Serlio, Bolognese, dove si mettono in disegno tutte le maniere di edifici, et trattano di quelle cofe, che ono più neceffarie à fapere gli architetti* (Venice, Giacomo de'Franceschi, 1619), fols. 126, 133v. On Serlio and how his ideas about architecture influenced Romano, see also Anthony Blunt, *Artistic Theory in Italy, 1450–1600* (Oxford: Clarendon, 1966), 130–59.

19 The fireplace seems to be the only permanent source of light that this room had. Its place is clearly marked under the volcano on the lower part of the east wall. It is possible that candelabras were used as well or candles held by servants for extra light. This kind of light, like the flames in the fireplace, is unstable and creates flickering shadows on the walls. The experience of the visitor today is very different since the space is lit by modern windows and doors as well as bright museum-quality lighting.

20 This is the only part of the walls' fresco that is painted according to the rules of *perspectiva*. Perhaps this is what Vasari means by "fine judgment."

21 Vasari, *Lives*, trans. Bondanella and Bondanella (see note 15), 372.

those of the desperate giants (Fig. 11). Thus, the viewers could, at one moment, feel dwarfed by the huge figures that surrounded them and by the terrifying gods looking down at them from above, while at the next moment, they could feel like they were among the giants, casting similarly outsized shadows in the same space. The effect was no doubt destabilizing for the viewers' own sense of identity, as the distortions of scale alternated between forcing viewers to feel smaller and then larger than their actual size. This scale shift in the beholders' perceptions of themselves greatly impeded their ability to master the situation and distinguish reality from illusion.

The role of the giants in creating this perception-shifting and frightening world has been largely disregarded by scholarship.²² Romano's choice to depict the giants not as hybrid monsters, as they appear in Ovid's *Metamorphoses*, but as fully dressed, oversized Roman soldiers suggests that they embodied more than just a simple allegory of conquest. The appearance of giants in art and literature has a long history. In Greek and Roman mythology, they appear as the sons of Gaia (goddess of the Earth) and Uranus (god of the sky). As such, they are often interpreted as personifications of geographical elements, such as mountains and rock forms, and as forces of nature.²³ In their mutiny against the gods of Olympus, the giants threw rocks and mountains at the sky. Their punishment was carried out by the Earth, which crushed the giants within it.²⁴ During the Renaissance, depictions of giants became quite popular in both art and literature, with their conquest evoking victory over a formidable enemy. Their portrayal in the Room of the Giants, however, is very different. The beholders' fluctuating scale and po-

22 Some of the ideas posited in this article were first presented in the "Giants in the Middle Ages" seminar held at Tel Aviv University by Prof. Assaf Pinkus in 2022. I wish to thank him and the participants for their instructive comments.

23 The medieval perception of giants as wild, liminal entities and as hybrids, making them part of the natural world instead of human society, has been widely researched. See Jeffry Jerome Cohen, *Of Giants: Sex, Monsters and the Middle Ages* (Minneapolis, MN: University of Minnesota Press, 1999); Jeffry Jerome Cohen, "Monster Culture (Seven Theses)," *Monster Theory: Reading Culture*, ed. Jeffry Jerome Cohen (Minneapolis, MN: University of Minnesota Press, 1996), 3–25; Walter Stephen, *Giants in Those Days: Folklore, Ancient History and Nationalism* (Lincoln, NE: University of Nebraska Press, 1989); Assaf Pinkus, "'Eine rise starc unde grôz': Temporalities of Salvation in St. Jakob in Kastelaz," *Word & Image* 35.4 (2019): 347–66. Throughout the Middle Ages, giants developed into more sophisticated beings and came to signify a large variety of meanings in their various presentations in the medieval city. See Assaf Pinkus, *Giants in the Medieval City. Studies in the Visual Culture of the Middle Ages*, 20 (Turnhout: Brepols, forthcoming 2024), 9–31.

24 Ovid, *Metamorphoses* 1.151–76, trans. Henry T. Riley (Cambridge, MA: Harvard University Press, 1958–60), https://www.gutenberg.org/files/21765/21765-h/21765-h.htm#bookI_fableV (last accessed on April 14, 2023).

sition in the disorienting space, particularly due to the immersive experience of the room, may have made them worried that they were also about to be buried by nature.

To underscore the multisensory confusion, sounds within the room were also amplified since the space acted as an echo chamber augmenting all noises.²⁵ The beholders' initial reaction to this multisensory experience might have been one of fear and panic, as Vasari describes, but with the realization that this dramatic response was a product of the artistic creation came a sense of delight. This is precisely why Vasari emphasizes that the ability to arouse fear is a great achievement of the artist.

Destabilizing Perception

The grandeur and complexity of Romano's Room of the Giants has long garnered scholarly interest. All former research follows in the footsteps of Vasari by describing the room and the reactions of the viewers as pleasurable fear and short-term fun. Since the fresco was created close to the time of Charles V's efforts to establish imperial power in Italy, its explanation as a political allegory prevailed.²⁶ For Frederick Hartt, Jupiter is a symbol of the imperial power with which the house of Gonzaga aspired to identify.²⁷ Hartt interprets the Room of the Giants as an antechamber to the tennis court in which the emperor loved to

²⁵ Acoustically an echo chamber means that sounds are reflected within the space. It creates echoes in the same way as they are created in churches or caves. The space has to be enclosed and empty, with the walls and floor made of hard materials.

²⁶ Charles V's reign, politics, and wars have been widely researched, and the literature is vast. See, among others, Alfred Kohler, *Karl V. 1500–1558: Eine Biographie* (Munich: C. H. Beck, 1999); Wim Blockmans, *Emperor Charles V, 1500–1558* (London: Oxford University Press, 2002); Juan Carlos D'Amico, *Charles Quint, maître du monde: Entre mythe et réalité* (Caen: Caen University Press, 2004). Leone Leoni (1509–1590) created a 1549 bronze medal with the emperor on one side and the scene of the giants' mutiny against Jupiter on the other. Even Pietro Aretino, known for his sharp satires and irony, sent a letter to Charles V in 1537, in which he compared Charles to Jupiter and his enemies to the giants felled by their *superbia* (pride). See Elena Parma-Armani, *Perino del Vaga, l'anello mancante: Studi sul manierismo* (Genoa: Sagep, 1986), 123; Pietro Aretino, *Il primo libro delle lettere*, ed. Fausto Nicolini. Scrittori d'Italia (Bari: Laterza, 1913), 153–54 (letter 133).

²⁷ Fredrick Hartt, *Giulio Romano* (see note 6), 1:152–59; Hartt, "Gonzaga Symbols in the Palazzo del Te," *Journal of the Warburg and Courtauld Institutes* 13.3/4 (1950): 151–88; here 152–59. Hartt misses Vasari's description of the floor of the room and involves the mosaic floor in his interpretation, not being aware of the fact that it is an eighteenth-century addition. On this, see note 17.

play. The emperor's act of throwing the ball is echoed by the figure of Jupiter hurling thunderbolts. The violence depicted in the paintings is also reflected in the rusticated architecture that Romano favored throughout his career.²⁸ Egon Verheyen shares many of Hartt's observations.²⁹ He too thinks the fresco is an allegory of the emperor's might and that its guests experienced a short wave of panic that was resolved in amusement. He provides a long list identifying all the gods and giants, many of which have since been corrected by Bodo Guthmüller.³⁰ Based on Ovid's translations into Italian, Guthmüller identifies the giant below the volcano as Typhoeus, who was buried under Mount Aetna in Sicily. This explains why this giant is depicted bent into a triangle. The link is reminiscent of the Latin name of Sicily: *Trincaria*. In the rest of Guthmüller's discussion, he adheres to the political explanation and views the room as a fleeting source of entertainment.

The same allegorical, political interpretation was given to the *Caduta dei Giganti*, the famous ceiling fresco of the Villa Doria in Genoa, painted during the same time period by Perino del Vaga.³¹ Political manipulation via art was very much in accord with the norms of the time, especially within this specific social milieu and courtly context. For both Doria and Gonzaga, their building and decoration efforts to honor the emperor and receive him with sufficient opulence were worthwhile investments because Charles V endowed them each with great honors

28 Using differently processed stones for luxury buildings became Romano's trademark, and the style was very fashionable in Rome. On this, see James S. Ackerman, "The Tuscan Rustic Order: A Study in the Metaphorical Language of Architecture" (see note 18), 15–34; and Alexis R. Culotta, *Tracing the Visual Language of Raphael's Circle to 1527*. Brill's Studies in Intellectual History, 313 (Leiden and Boston: Brill, 2020), 133–37.

29 Egon Verheyen, *Studien zur Baugeschichte des Palazzo del Te zu Mantua* (see note 8), 73–114; here, 79–95.

30 Bodo Guthmüller, "Ovidübersetzungen und mythologische Malerei: Bemerkungen zur Sala dei Giganti Giulio Romanos" *Mitteilungen des Kunsthistorischen Institutes in Florenz* 21.1 (1977): 38–68.

31 Laura Stagno, "Triumphing over the Enemy: References to the Turks as Part of Andrea, Gianettino and Giovanni Doria's Artistic Patronage and Public Image," *Capitale Culturale, Studies on the Value of Cultural Heritage*, supp. 6 (Macerata: Univ., 2010); *Changing the Enemy, Visualizing the Other: Contacts between Muslims and Christians in the Early Modern Mediterranean Art*, ed. Massimo Montella (2017): 145–88; here 146; George L. Gorse, "The Villa of Andrea Doria in Genoa: Architecture, Gardens and Urban Setting," *Journal of the Society of Architectural History* 44.1 (1985): 18–36; Nurit Golan, "Subversion in Perino del Vaga's *Fall of the Giants*, Villa Andrea Doria, Genoa," *Sixteenth Century Journal* 55.3/4 (forthcoming, 2024).

after visiting their palaces.³² In this context, it is interesting to note that Romano's work, which created an extremely emotional and memorable experience for its beholders, made the political allegory of the fresco recede in importance, despite the fact that it had received considerable attention in contemporary literature and art.

Accordingly, an interpretation that responds to the overwhelming disorientation engendered by the room as outlined above, rather than iconography or politics, merits consideration. We do not have any information about the original sixteenth-century furnishings for the Room of the Giants that could have indicated its use apart from being a space in which to consume its art.

Paula Carabell raised the first reception-focused hypothesis asking what caused the beholders to fear.³³ She explained the sense of alarm that was created by Romano's methods of painting due to *trompe l'œil* and illusionism. The multi-sensory experience aroused in the spectators by being immersed in the sight of the tumbling bodies, mountains, and palaces, the noises echoing around the space, and the flickering light of the fireplace created panic. Carabell focuses on the fact that the situation inverts the normal art-viewing relationship between observers and observed. The direction of the gaze is reversed in the Room of the Giants since the gods gaze down from the cupola upon the viewers just as they do upon the flailing giants, thereby transgressing the separation that usually divides viewers from art.

Sally Hickson deals with the reception of the palace as a whole.³⁴ Through Romano's abundant use of *trompe l'œil* and illusionism, Hickson argues that the artist comments on the sensual and physical pleasures made possible by the various overwhelming experiences of seeing found all throughout the palace. Many of the classical stories depicted in the palace, as in the Room of Psyche, for example, deal with sight and its power. The Room of the Giants similarly comments on this sense by showing terror created by sight. This engagement with sight is only one of the many sensations of pleasure depicted throughout the place. She further concludes that since the painting of the Room of the Giants was begun in 1532, in

³² Andrea Doria, who became a member of the Order of the Golden Fleece, was granted the Princedom of Melfi, and Genoa was made a republic. Federico II was granted dukedom of the republic of Mantua.

³³ Paula Carabell, "Breaking the Frame: Transgression and Transformation in Giulio Romano's *Sala dei Giganti*," *Artibus et Historiae* 18.36 (1997): 87–100.

³⁴ Sally Hickson, "More Than Meets the Eye: Giulio Romano, Federico II Gonzaga and the Triumph of *Trompe-l'oeil* at the Palazzo del Te in Mantua," *Disguise, Deception, Trompe-l'oeil, Interdisciplinary Perspective*, ed. Leslie Boldt-Irons, Corrado Federici, and Ernesto Virgulti. *Studies on Themes and Motifs in Literature*, 99 (New York: Peter Lang, 2009), 41–60.

time for the second visit of the emperor, its imagery was chosen to prove Federico's loyalty to his ruler.

For Maria Maurer the palace is a performative space in which Federico II defined and expressed his masculinity.³⁵ The entire palace is horrific and terrifying. Maurer argues it has a "monstrous corporality that could elicit the performance of identities that were troubling and licentious."³⁶ The Room of the Giants is an aspect of the palace in which classifications of gender are questioned: the cupola is painted with a strict geometric perspective that adheres to a rational order, which is considered a masculine attribute, while the chaos of the fallen giants is irrational and consequently feminine. The outcome is that the beholders' own gender relationships become unstable when in the room.³⁷

I argue that the Room of the Giants, which was executed later than most of the other rooms in the palace, stands by itself and that its political significance, though important, is not its principal message. The room is a unique space that creates a virtual reality and playfully deceives the viewers in order not merely to divert them momentarily but to stimulate their prolonged interest and rumination.

By fully sheathing the walls in an unbroken painted narrative, Romano ignored the painterly conventions established earlier in the Renaissance. Leon Battista Alberti's celebrated *De Pictura* (1435) advises that the painter in search of a more realistic result should paint as if he was looking through an imaginary window frame.³⁸ This method made the painting a kind of extension of the painter's world, giving the artist control of the geometric perspective and also determining the location of the viewers in space, outside of the frame. This sense of space provides a sense of the surrounding world, giving viewers the feeling of being situated in a controlled and safe world.

Creating a continuum that surrounded the viewers from all sides made them lose this privileged position; it made them lose their sense of control. By abolishing the regulated image of the world, presented through a set frame, Romano took away the viewers' sense of safety. In the Room of the Giants, the artist refrained almost completely from the use of Alberti's "window," creating instead

35 Maria F. Maurer, *Gender, Space and Experience at the Renaissance Court: Performance and Practice at the Palazzo Te*. Visual and Material Culture, 1300–1700 (Amsterdam: Amsterdam University Press, 2019), 15–130; here 123–49.

36 On the concept of geometric perspective as a rational construct, see William M. Ivins Jr., *On the Rationalization of Sight, with Examination of Three Renaissance Texts on Perspective* (New York: Da Capo, 1973), 7–14.

37 I personally find it hard to see any femininity in these huge muscular Roman soldiers.

38 Leon Battista Alberti, *On Painting*, trans. John R. Spencer (New Haven, CT: Yale University Press, 1966), 39–40. See also Blunt, *Artistic Theory in Italy* (see note 17), 1–22; and Erwin Panofsky, *Perspective as a Symbolic Form*. Rpt. (1927; New York: Zone, 1991).

the feeling of an unfamiliar, alien, and uncontrollable space into which the viewers were plunged.³⁹ The disjunction between contradicting implications of the illusions, between the sense of watching and being watched, created a tension to the experience of the room that was almost a paradox, as beholders alternated between honored guests and condemned giants.⁴⁰

The characteristics of Mannerism are exactly these senses of vagueness and uncertainty together with a strong emotional effect which are provoked in the artwork's beholders.⁴¹ Mannerist artworks, being intended for a sophisticated cultural milieu, rejected very often the idea that an objective view of the world is possible, as was accepted in the Renaissance. In this way, too, Romano counters Alberti, who argues for the importance of narrative in art: "I like there to be someone in the *historia* who tells the spectator what is going on . . . everything the people in the painting do among themselves or perform in relation to the spectator, must fit together to represent and explain the *historia*."⁴²

By adopting an illusionistic style and creating a space that induced a misperception of reality, thereby transforming the role of the spectator, Romano accomplished the very opposite of Alberti's directive: he warns his spectators not to trust blindly their own eyes. Romano's Room of the Giants was thus a Mannerist masterpiece, perfectly encapsulating the divergence of truth and human apprehension and creating a profound feeling of disquiet for those standing in the

39 There are two notable exceptions: on the west side of the room there is a cave-like opening through which a sea and some refugees on a raft can be discerned, receding in geometrical perspective; and the illusionary cupola depicting the gods of the Olympus is rendered in linear perspective, creating an illusion of infinity.

40 On the paradox in Renaissance culture, art, literature, and philosophy, see Rosalie Littell Colie, *Paradoxica Epidemica: The Renaissance Tradition of Paradox* (Princeton, NJ: Princeton University Press, 1966), 3–42.

41 The years from 1520 till about 1585 are considered the years of Mannerism. See Ernst H. Gombrich, "Mannerism: The Historiographic Background," *Studies in Western Art: Acts of the Twentieth International Congress of the History of Art*, vol. 2, ed. Millard Meiss (Princeton, NJ: Princeton University Press, 1963), 163–73; John Shearman identifies Mannerism with a style that appealed especially to the tastes of courtiers who were supposed to be well-read intellectuals. See "Mannerism as an Aesthetic Ideal," *Studies in Western Art*, 200–21. Walter F. Friedlander, "Mannerism and Anti-Mannerism in Italian Painting," *Reading in Italian Mannerism*, ed. Liana De Girolami Cheney American University Studies, Series 20, Fine Arts 24 (New York: Peter Lang, 2004), 143–92; George Hugh Smyth, "Mannerism and Maniera," *Reading in Italian Mannerism*, ed. Liana De Girolami Cheney, 69–112; Sydney J. Freedberg, "Observation on the Painting of the Maniera," *Art Bulletin* 47 (1965): 147–97; David Summer, "Maniera and Movement: The Figura Serpentinata," *Art Quarterly* 35 (1972): 269–301; and John Shearman, *Mannerism* (Harmondsworth: Penguin, 1967).

42 Alberti, *On Painting* (see note 38), 80–83.

room.⁴³ These feelings were created by experiencing the uncontrolled forces of nature, even if only in an illusionistic way.

The effect of surprise produced by the illusions in the room is generated by the divergence between the beholder's previous visual experience, the illusionistic one, and the room's corporeality, resulting in the comprehension that they have been deceived. The room inspires self-doubt in its viewers and distrust in their own senses. Romano's methods of technical illusionism and *trompe l'œil* are so disorienting and the space itself appears so differently from what logic mandates that the beholders have to reconstruct their worldview. This experience of self-deception triggers a cognitive process by which reality is decoded anew and could function as an ethical resource of self-examination.⁴⁴ This self-examination might also induce a different perception of nature and its powers and induce some modesty in humans when facing nature, unlike the *superbia* of the giants.

Reflecting upon the discrepancy between visual information and reality makes it clear that we cannot trust visual information. Illusionism and *trompe l'œil* constitute a cultural game that is very much self-aware. They force viewers to recognize the inbuilt human commitment to reality.⁴⁵ Illusionism dramatizes the fact that we are epistemically bound: that what we think we see is connected to prior epistemic notions, to something we have apprehended in the past and which is actually a habit. By using his art to create a situation in which emotions and experience overcome sight, disrupting the objective perception of the world,

⁴³ The preoccupation of scientists and painters with mirrors, lenses, camera obscura, and all sorts of optical means added to a fundamental concern with the deeper issue here: could what we see, even with visual aids, be trusted? Giulio was assisted by mirrors as described by the artist Cristoforo Sorte, who was his apprentice in Mantua. See Hickson, "More Than Meets the Eye" (see note 34), 49. On the influence of science on painting and vice versa, see Samuel Y. Edgerton, *The Mirror, the Window and the Telescope: How Renaissance Linear Perspective Changed Our Vision* (Ithaca, NY: Cornell University Press, 2009); Ofer Gal and Raz Chen-Morris, *Baroque Science* (Chicago: Chicago University Press, 2013), 1–15, 53–78; David C. Lindberg, *Theories of Vision from Al-Kindi to Kepler* (Chicago: University of Chicago Press, 1976), 104–77; Karl Popper, *Objective Knowledge* (Oxford: Clarendon, 1972), 180; Martina Warner, *Eyes Lies and Illusion: The Art of Deception* (London: Hayward Gallery, 2004), 13–39.

⁴⁴ Alan Singer, "Illusionism and the Self-Deceiving 'I,'" *SubStance* 38.3 (2009): 148–71; Richard L. Gregory, *Eye and Brain: The Psychology of Seeing* (Princeton, NJ: Princeton University Press, 1997, 2015); Ernst H. Gombrich, *The Image and the Eye: Further Studies in the Psychology of Pictorial Representation* (London: Phaidon, 1960); Claire Farago, "Ingenuity and Artist's Ways of Knowing," *Renaissance Futurities, Science, Art, Invention*, ed. Charlene Villaseñor Black and Mari-Tere Álvarez (Berkeley, CA: California University Press, 2020), 130–48; Douglas Low, *Merleau Ponty's Last Vision: A Proposal for the Completion of the "Visible and the Invisible"*. Vol. 1: *The Visible and Nature* (Evanston, IL: Northwestern University Press, 2000), 10–28.

⁴⁵ Sally Hickson, "More than Meets the Eye" (see note 34), 99–141.

Romano questions the notion of the faithfulness of human perception to the objective, natural world, forcing the beholders to see anew themselves and the nature which surrounds them.

The Search for Truth

It is quite ironic that art, which was blamed for being deceptive, was used by Romano to engage with deeper questions of truth. Truth as an important virtue of art is at the center of Vasari's writings. The relation of painting to truth, he believes, is of utmost importance. When writing about Masaccio (1401–1428), Vasari quotes Annibale Caro's (1507–1566) poem that celebrates the artist's work for its value of truth: "I painted and my painting was equal to truth; I gave my figures poses, animation, motion, and emotion."⁴⁶ The fact that the greatly admired Michelangelo was a student of Masaccio's, as Vasari does not forget to mention, certainly made the issue of truth in painting even more significant.

In his *Metaphysics*, Aristotle postulates that "sight makes us know."⁴⁷ In contrast to Aristotle, Romano demonstrates, as I discussed above, that sight can mislead us and be responsible for our misconceptions. What seems real to us and has the status of truth should consequently be questioned. By creating a situation in which the beholders' emotions and personal experiences precede their visual perception of reality and disrupt it, Romano seems to be more a follower of Plato, whose philosophy had become influential in the Renaissance following the translation of and commentaries on his works by Marsilio Ficino (1433–1499).⁴⁸

⁴⁶ Vasari, *Lives*, trans. du Vere (see note 1), 101–09, 143–70.

⁴⁷ Aristotle, *Metaphysics* 1.1.980a, in *A New Aristotle Reader*, trans. John L. Ackrill (Princeton, NJ: Princeton University Press, 1989), 255. A full quotation: "All men by nature desire to know. An indication of this is the delight we take in our senses; for even apart from their usefulness they are loved for themselves; and above all others the sense of sight . . . we prefer sight to almost everything else. The reason is that this, most of all the senses, makes us know and brings to light many differences between things."

⁴⁸ On Romano, see Hartt, *Giulio Romano* (see note 6), 1:152–59; Maurer, *Gender, Space and Experience* (see note 29); Manfredo Tafuri, "Giulio Romano: Linguaggio, Mentalità, Committanti," *Giulio Romano 1499–1546, Architecture in Early Modern Italy*, ed. Manfredo Tafuri (Milan: Electra, 1989), 15–63; and Piccinelli, *Giganti* (see note 8). Ficino, one of the pre-eminent Platonists of the Italian Renaissance, was responsible for Platonism becoming the leading philosophy in humanist circles due to his translations and commentary on Plato, Plotinus, and the Platonic tradition in general. The literature on him and his work is vast. See, for example, Michael J. B. Allen, *Synoptic Art: Marsilio Ficino on the History of Platonic Interpretation*. Istituto Nazionale di Studi sul Rinascimento, 4 (Florence: Olscheki, 1998); Raffini, *Marsilio Ficino, Pietro Bembo, Baldassare Casti-*

I contend that the main metaphor expressed by the Room of the Giants is that of a cave. The enclosed dark and seemingly rounded space was lit primarily by a fireplace, making the mutant shadows of the visitors intermingle with the huge images painted on the walls; every noise was amplified and distorted by the echo-chamber effect, just as in a cavern. Taken together, these aspects can evoke the cave in Plato's famous allegory.

In this tale recounted in *The Republic*, Plato discusses prisoners who respond differently to their constructed reality based solely on shadows cast on the cave wall before them. He thus grapples with truth and perception, asking similar questions to those that Romano posits in his artwork. Both philosopher and artist assert that sight cannot be trusted as a means to acquire truth about the world, about nature, or about the gods because it is influenced by our prior visual experiences, our history of epistemic perception. As Plato writes in his dialogue:

Socrates: And now, I said let me show in a figure how far our nature is enlightened: Behold! *Human beings living in an underground cave, which has a mouth open toward the light and reaching all along the cave; here they have been since their childhood and have their legs and necks chained so they cannot move, and can only see before them . . . behind them a fire is blazing at a distance, and between the fire and the prisoners there is a raised way . . . and they see only their own shadows of one another, which the fire throws on opposite wall of the cave?*

Glaucon: How could they see anything but shadows if they were never allowed to move their heads?

Socrates: And if they were able to converse with one another, would they not suppose that they were naming what was actually before them? And suppose further that the prison had an echo which came from the other side, would they not be sure to fancy . . . that the voice which they heard came from the passing shadows? To them the truth would be nothing but the shadows of the images . . . and then conceive someone saying to him that what he saw before was an illusion but now his eye is turned to more real existence he has clear vision . . . *The prison house is the world of sight, the light is the sun and the journey upward is the ascent of the soul into the intellectual world . . . he who would act rationally either in public or private life must have his eyes fixed* (Emphasis added).⁴⁹

glione (see note 11), 1–58; André Chastel, *Marsilio Ficino et l'art* (Geneva: Droz, 1959); James Hankins, "Some Remarks on the History and Character of Ficino's Translation on Plato," *Marsilio Ficino et il Ritorno di Platone*, ed. Gian Carlo Garfagnini (Florence: Leo S. Olschki, 1986), 1:287–304; Ardis Collins, *The Secular Is Sacred: Platonism and Thomism in Marsilio Ficino's "Platonic Theology"* (The Hague: Martinus Nijhoff, 1974); Marsilio Ficino, *Commentary on Plato's Symposium on Love*, trans. Jayne Sears (Dallas, TX: Spring Publications, 1985).

⁴⁹ Plato, "Allegory of the Cave," *The Republic* 7.514a–521d, trans. Benjamin Jowett (London: Andrews, 2012), <http://classics.mit.edu/Plato/republic.8.vii.html> (last accessed on November 1, 2023).

Romano, like Plato, wants to shake us out of our comfort zone and urges us to question our visual apprehension. By exploring a new spatial logic and creating its own virtual reality, Romano's Room of the Giants constructs the same strong imperative to see anew as does Plato in his allegory. As Ficino writes, "Those who attempt it must guard against the illusions of the senses and the phantasy and proceed toward it by the divine light of the intelligence."⁵⁰ The beholder apprehends the depiction of nature with his/her senses. This very depiction of nature serves as a warning about the deception of the senses. Thus, the performative experience of viewing the room and contemplating its didactic and philosophical significance is reminiscent of the dramatic experience involved in the Socratic dialogues.⁵¹

Previous research has suggested that the Room of the Giants was designed purely as a brief, whimsical entertainment, part of the recreation activities offered to Duke Federico II's guests. However, beyond the purpose of entertaining distraction or figuring an allegory of imperial power, I suggest that this room may have offered a source for intellectual discussions that enabled courtiers to show off their wide erudition, worldly manners, and wit. Viewers needed profound knowledge of the major antique works in order to decipher the scenes, making their understanding a *de facto* status symbol. An aristocratic court in the early sixteenth century, as described by Castiglione, reflected the spirit of humanism and intellectual sophistication. A humanistic education was imperative for courtiers and their lords.⁵² With its many evocations of Plato's cave, Romano's space was a perfect setting in which to discuss – and even experience – the search for truth and the limited powers of sight to reach this end.

We know many of the topics of the symposia popular at courts from Castiglione's *Book of the Courtier*, which he set in the duchy of Urbino and which involved courtiers who were intellectuals, writers, poets, philosophers, and political dignitaries, all of them humanists.⁵³ These symposia became a norm and a status

50 See also Marsilio Ficino, *The "Philebus" Commentary*, trans. Michael J. B. Allen (Berkeley, CA: University of California Press, 1975), 142.

51 The relationship between philosophy and theater, either as a didactic method or as an intrinsic cultural bond, is analyzed by Freddie Rokem, *Philosophers and Thespians: Thinking Performance* (Stanford, CA: Stanford University Press, 2010).

52 Having a personal tutor, writer, or philosopher was quite common among the nobility aspiring to an artistic and literary education. See Michael Baxandall, "A Dialogue on Art from the Court of Leonello d'Este: Angelo Decambrio's *De Politia Litteraria*, pars LXIII," *Journal of the Warburg and Courtauld Institutes* 23.3–4 (1963): 304–26.

53 Castiglione, *Book of the Courtier* (see note 3); Arthur F. Kinney, *Continental Humanist Poetics, Studies in Erasmus, Castiglione, Marguerite de Navarre, Rabelais and Cervantes* (Amherst, MA: University of Massachusetts Press, 1989), in particular chapter 3 on Castiglione: "*Della mortal ob-*

symbol in all aspiring palaces. Questions of beauty as a reflection of truth, friendship among men, virtues, and palace intrigues involving court ladies and marriages were all discussed.⁵⁴ Among the many topics to be discussed by the honorable guests of the duke, such as music, literature, politics, and human behavior, a large place was reserved to discussions about painting versus sculpture as reliable imitations of nature. Nature and a realistic depiction of it became a touchstone for the quality of art production. The *Paragone*, the rivalry between painting and sculpture in the competition over the allegiance to truth, was another popular topic for debate at the time.⁵⁵

'Truth' was a wide concept that included the approach to human behavior, to nature, and to God. *The Book of the Courtier* testifies to the fact that the definition of the arts was indeed a topic that raised passionate discussions: "Although painting is different from sculpture, both spring from the same source, which is good design."⁵⁶

The Role of the Artist

The illusionistic imitation of nature and its distortions were fundamental to Romano's ability to have the Room of the Giants function as site of stimulating intellectual discussion.⁵⁷ Strong emotional effects were needed and were found in the

livione questa chiara memoria: Baldassare Castiglione, Il Libro del Cortegiano, and the Poetics of Eloquence," 87–134.

54 See Castiglione, *Book of the Courtier* (see note 3), bk. 1, 49–53; Raffini, *Marsilio Ficino, Pietro Bembo, Baldassare Castiglione* (see note 11), 95–146; Burke, *Fortunes of the Courtier* (see note 3); and Cavallo, "Joking Matters" (see note 3), 402–24.

55 Sefy Hendler, *La guerre des arts: Le paragone peinture – Sculpture en Italie, XVe–XVIIe siècle*. *LermArte*, 10 (Rome: l'Erma' di Bertschneider, 1972); Sefy Hendler, "Paragone and the Swinging Rope: Parmigianino's Recto-Verso Drawing of a Nude," *Source* 38.4 (2019): 216–26.

56 Castiglione, *Book of the Courtier* (see note 3), bk. 1, 53. In the sixteenth century, *disegno* was considered the principle that underlies all visual arts, coming prior to color or to any execution in material. The courtiers were supposed to demonstrate their being up to date in the controversy between *disegno* and *colore*, the former considered inventive and more intellectual, the latter more intuitive. See Mary Ann Jack, "The *Accademia del disegno* in Late Renaissance Florence," *Sixteenth Century Journal* 7.2 (1976): 3–20.

57 Nicholas Webb, "Momus with Little Flateries: Intellectual Life at the Italian Courts," *Mantegna and the Fifteenth Century Court Culture: Lectures Delivered in Connection with the Andrea Mantegna Exhibition at the Royal Academy of Art, London*, ed. Francis Ames-Lewis and Anka Bednarek (London: Dept. of History of Art, Birkbeck College, University of London, 1992), 56–71; Paul Davis, "Quattrocento Palaces in Mantua and Ferrara," *Mantegna and the Fifteenth Century Court Culture*, 72–83.

uncontrollable forces of nature that were made concrete, almost tangible in Romano's work. Nature's dangers could shake the duke's guests, bringing up topics that prevailed in art, literature, and science. By destabilizing the viewers' sense of their place in the world, it made them doubt their own abilities to perceive correctly the world, to perceive nature and themselves as part of it. This led to deeper queries about the nature of truth and truth in nature. The artist and his ability to manipulate appearances was thus a powerful force.

On the east side of the Room of the Giants, next to the erupting volcano and a crushed giant, several apes can be discerned (Fig. 12). These apes have been interpreted in previous research as beings created from the giants' blood, signifying the giants' *superbia* (pride) and evil. This interpretation is based on the medieval connotation of apes as sinful and lustful base creatures, signifying the Devil. Although apes do not actually appear in Ovid's *Metamorphoses*, sixteenth-century readers believed he was the source of the claim that giants' blood was transformed into apes; Bodo Guthmüller convincingly argues that Niccolò degli Agostini introduced this mistake in his 1522 translation of Ovid.⁵⁸

In the later Renaissance, the negative attitude toward apes changed, and many wealthy households kept them as pets; so, as a result, they began to appear in many paintings of the time.⁵⁹ The key trait associated with apes shifted from sin to mimicry. At the same time, the popularity of illusionism and *trompe l'œil* during the sixteenth century cast the painter in the role of trickster and deceiver, one that Romano, as we have seen, fully embodies. The painter, by his nature, seeks to persuade us to accept as real what cannot be anything but an arrangement of pigments on a flat surface. He imitates the world created by God just like an ape imitates the actions of humans. Both are driven to do so by their very nature and should not be morally rebuked.⁶⁰

⁵⁸ Bodo Guthmüller, "Ovidübersetzungen und mythologische Malerei" (see note 30), 38–68; here 42–52, especially 45. See also Hartt, *Giulio Romano* (see note 6), 1:156; Ernst Gombrich, "Zum Werk Giulio Romanos," *Jahrbuch der kunsthistorischen Sammlungen in Wien* 9 (1935): 121–50; here 125.

⁵⁹ James Knowles, "'Can you not tell a man from a marmoset?': Apes and Others on the Early Modern Stage," *Renaissance Beasts: Animals, Humans and Other Wonderful Creatures*, ed. Erica Fudge (Urbana, IL: University of Illinois Press, 2004), 138–63.

⁶⁰ The description of the artist as the ape of nature seems to have become the highest compliment for the accurate mimicking of nature. Baugham quotes Shakespeare's *The Winter Tale*: "that rare Italian Master Iulio Romano who (had he himself Eternitie and could put Breath into his Work) would beguile Nature of her Custom so perfectly he is her Ape." See Denver E. Baugham, "Shakespeare's Problem of the Romanos," *Journal of English and Germanic Philology* 36.1 (1937): 35–39. I wish to thank Prof. Thomas Willard, University of Arizona, for mentioning to me *The Winter Tale* in regard to Giulio Romano.

The aphorism *ars simia naturae* (art, the ape of nature) has two opposite meanings: “art as forgery” or “art as representation of nature, of God’s creation.”⁶¹ In the sixteenth century, the latter meaning prevailed. *Ape* became a positive metaphor for an artist. This was probably due to Boccaccio’s *De genealogia deorum gentilium*, an extensive compilation of Greek and Roman mythology that became extremely popular and was a source for many mythological topics in art, including those used by Romano.⁶² According to Boccaccio’s compendium, Epimetheus, Prometheus’s brother, created a human figure out of mud, for which he was punished by being transformed into an ape. The connection between apes and creativity was even clearer in the case of Vulcan. Vulcan, according to Boccaccio, was brought up by apes and acquired from them his talent for imitation. He knew how to manufacture any artifact, not only the thunderbolts for Jupiter, and was thus also named *Artificiosus*.

Romano’s inclusion of apes in his decoration for the Room of the Giants underscores the main theme of his work: the relation of truth to imitation, of mimesis to nature. The ape is a metaphor for Romano’s own abilities as an artist. Romano, the artist, celebrates his ability to trick the viewer by imitating nature, but he is not immoral in doing so since he does it to make the viewers self-aware of their own human limitations and to promote their continual search for truth.⁶³

Conclusion

Romano shaped the Room of the Giants as an enjoyable and witty multisensory experience, as has been posited by former research discussed throughout the article. However, I contend that it was, in addition, a stimulus for philosophical discussions that raised prolonged interest in the painted space and its significance. The chamber allowed Federico II Gonzaga to present himself as a worldly, intel-

⁶¹ Simona Cohen, “*Ars simia naturae*: The Animal as Mediator and Alter Ego of the Artist in the Renaissance,” *Explorations in Renaissance Culture* 43.2 (2017): 202–31; esp. 218–22. On the development of the perception of the two opposite natures of art, see Horst Waldemar Janson, *Apes and Apes Lore in the Middle Ages and in the Renaissance*. Studies of the Warburg Institute, 20 (London: Warburg Institute, 1952); Harry Bober, review of *Apes and Ape Lore, in the Middle Ages and the Renaissance*, by H. W. Janson and H. Frankfort, *Art Bulletin* 36.2 (1954): 145–48.

⁶² Giovanni Boccaccio, *Genealogy of the Pagan Gods*, trans. Jon Solomon (Cambridge, MA: Harvard University Press, 2017), esp. bk. 14, which deals with a defense of poetry.

⁶³ A similar symbol signifying the idea of the artist being the ape of nature appears in Michelangelo’s *Dying Slave* from 1513, in which an ape can be discerned behind the man’s legs, Louvre, Paris.

lectual, and witty lord to his guests and his emperor at the Palazzo del Te in Mantua, and it also invited its viewers to engage in deeper humanist thought and discussion and to reflect on themselves vis-à-vis nature.

By creating an illusionistic immersive reality, Romano took beholders out of their comfort zone, forcing them to abandon their habitual perception of a controlled world and controlled nature by plunging them into a chaotic universe that was almost nearing its end, with all the panic that such an experience entails. Becoming an active member of the “show” made the beholders insecure about their own place and even their own scale in the world. This frightening experience was then quickly revealed as an illusion, thus proving the fundamental error that lies in trusting their perception. While this awareness could inspire a new understanding of the self and deeper discussions about truth, the fear created by these stimuli ultimately led to pleasure. Once the initial illusion produced by the frescoes was comprehended and the beholder realized that there was no real danger, the experience of Romano's Room of the Giants could end in the spectators' laughter. A new perception of nature and human status in it emerged. Deceptive art was used ironically by Romano to shake us out of our self-deception in believing that we control nature, while we can hardly apprehend it.



Fig. 1: Giulio Romano, Palazzo del Te, 1525–35. Photo © Author.



Fig. 2: Tennis balls found on the palace premises. Photo © Author.



Fig. 3: The Room of the Giants (west wall), left: Refugees on a raft, right: an earthquake, above: Mount Olympus. Photo: Public domain.



Fig. 4: Collapsing palaces. Photo © Comune di Mantova, Musei Civici.



Fig. 5: Giants in agony (detail). Photo © Author.



Fig. 6: Giants clinging to a raft. Photo © Comune di Mantova, Musei Civici.



Fig. 7: A *Furia* holding snakes, a volcanic eruption, and an ape. Photo © Author.



Fig. 8: The illusionistic cupola, Mount Olympus. Photo © Author.



Fig. 9: The cupola (detail). Photo © Author.



Fig. 10: Traces of the former fireplace with the blazing volcano above. Photo © Author.



Fig. 11: Suffering giants with shadows. Illustration © Michael Golan.



Fig. 12: An ape next to a bleeding head of a giant. Photo © Author.

David Tomíček

Human Body, Natural Causes, and Aging of the World in Czech-Language Sources of the Late Middle Ages and Early Modern Period

Abstract: Understanding nature as an entity operating in the created world was one of the great intellectual innovations of the High Middle Ages. The authors who stopped interpreting nature as a cloak covered with symbols and allegories and began to rediscover nature as an internal factor of causes and effects, the knowledge of which is the task of the natural sciences until today, came mainly from cathedral schools. This study, which deals with Czech-language texts from the fifteenth to the seventeenth centuries, is also based on the conceptualization of nature as an order of created things. The first part of the study focuses on the metaphorical image of the human being as a microcosm and seeks to answer what function this discursive device performs in vernacular texts intended for a wider audience. The focus of the study then shifts to the process of growth and aging of the human body, which is observed mainly from a medical perspective, defined by the concepts of innate heat (*calor naturalis*) and radical moisture (*humidum radicale*). The topic is analyzed within the context of the interconnection between the greater and lesser world. The last part of the study deals with the incompletely preserved treatise on plague by Oldřich Velenský of Mnichov (d. after 1531) and examines the part that interprets a plague epidemic as a natural manifestation of the aging of the world and a sign of its end. This section examines the way in which the natural philosophical interpretation of an environmental crisis becomes part of the eschatological.

Keywords: Natural causes, microcosm, macrocosm, environmental crisis, Bohemian sources, medieval and early modern period

Introduction

'Nature' ranks among the most complex terms in the English language,¹ and this assessment can certainly be extended to other modern languages that bear the legacy of ancient philosophy. The Czech language uses a pair of words, 'příroze-nost' (*naturalness*) and 'příroda' (*nature*),² to cover the semantic field of the term. Understanding the nuances in meaning of this concept was no less easy in a discourse shaped by medieval Latin. As Robert Bartlett recently pointed out, *The Dictionary of Medieval Latin from British Sources* alone documents twenty-five sub-meanings of 'nature' (*natura*).³ It is therefore a relief to discover that even the experienced teacher, Hugh of Saint Victor (ca. 1096–1141), at the beginning of the chapter on 'nature' (*Quid sit natura*) in his encyclopaedic treatise, *The Didascalicon* (*De eruditione docta*), admitted that this concept is difficult to define.⁴ Despite this challenge, he recapitulated its three major meanings: 'Nature' is in the first place that "which gives to each thing its being," then "the peculiar difference giving form to each thing," and lastly, "an artificer fire coming forth from a certain power to beget sensible objects."⁵ In other words, Hugh says that nature is something like an archetypal exemplar of all things, at the same time also a thing's peculiar being, and also a kind of creative force, corresponding to the claim of physicians that all things are procreated from heat and moisture.⁶

Another dimension of 'nature' is revealed by the encyclopedist's definition of that part of philosophy which is devoted to the study of nature. Hugh writes on

1 Carolyn Merchant, *Autonomous Nature. Problems of Prediction and Control from Ancient Times to the Scientific Revolution* (London: Routledge, 2016), 8.

2 For more on the meaning and interrelationship of the two words, see Zdeněk Kratochvíl, *Filosofie živé přírody* (Prague: Hermann a synové, 1994), 11–12.

3 Robert Bartlett, *The Natural and the Supernatural in the Middle Ages* (Cambridge: Cambridge University Press, 2008), 2.

4 "... ut ait Tullius, 'naturam diffinire difficile sit'" *Hugonis de S. Victore De eruditione docta*, ed. J.-P. Migne. *Patrologia Latina*, 176 (Paris: Garnier Fratres, 1880), 748. For the English translation, see *The Didascalicon of Hugh of St. Victor: A Medieval Guide to the Arts*, trans. Jerome Taylor (New York: Columbia University Press, 1961), 57. On Hugh's encyclopedia, see also Paul Rorem, *Hugh of Saint Victor* (New York and Oxford: Oxford University Press, 2009), 21–37; Dominique Poirel, "Reading and Educating Oneself in the 12th Century: Hugo of Saint-Victor's *Didascalicon*," *A Companion to Twelfth-Century Schools*, ed. Cédric Giraud. Brill's Companions to the Christian Tradition, 88 (Leiden and Boston: Brill, 2020), 113–40.

5 "Natura est, quae unicuique rei suum esse tribuit Natura unamquamque rem informans, propria differentia dicuntur Natura est ignis artifex, ex quadam ut procedenes in res sensibiles procreandas." *Hugonis de S. Victore De eruditione docta* (see note 4), 748.

6 "Physici namque dicunt, omnia ex calore et humore procreavi." *Hugonis de S. Victore De eruditione docta* (see note 4), 749.

physics that it searches out and considers the causes of things as found in their effects, and the effects as derived from certain causes.⁷ This definition is based on the intellectual atmosphere of cathedral schools of the mid-twelfth century, in which the questioning of the causes of things, inspired by Plato's dialogue *Ti-maeus*, led to the so-called desacralization of nature.⁸ Thus, the medieval concept of nature as a system of causalities, departing from the persisting concept of nature as a symbolic-allegorical structure of meanings, is the subject of this study, which seeks fragments of this knowledge in Czech-language texts from the late Middle Ages and the first two centuries of the early modern period.

I will deal with three issues. I will first focus on the presentation of the timeless anthropological idea of classical antiquity that a human is a microcosm mirroring in his/her structure the universe.⁹ I will be particularly interested in the function of this discursive device in the texts under study. In the second part, I will examine the way in which these vernacular texts present scientific knowledge about the process of growth and aging of the human body.¹⁰ I will deal with

7 "Physica causas rerum in effectibus suis et effectus in causis suis investigando considerat." *Hugonis de S. Victore De eruditione docta* (see note 4), 757.

8 Tulio Gregory, "Nature," *Dictionnaire raisonné de l'Occident médiéval*, ed. Jacques Le Goff and Jean-Claude Schmitt (Paris: Fayard, 1999), 806–20. Cf. Marie-Dominique Chenu, *La théologie au douzième siècle. Études de philosophie médiévale*, 45 (Paris: Librairie philosophique J. Vrin, 1957), 19–51; Jacques Le Goff, *Les Intellectuels au Moyen Âge* (Paris: Le Seuil, 1957), 56–63; Tulio Gregory, "La Nouvelle idée de nature et de savoir scientifique au XIIe siècle," *The Cultural Context of Medieval Learning*, ed. John E. Murdoch and E. D. Sylla (Dordrecht: Reidel, 1975), 193–218; Tulio Gregory, "Le platonisme du XII siècle," *Revue des sciences philosophiques et théologiques* 72.2 (1987): 243–59; Heinrich Fichtenau, *Ketzer und Professoren: Häresie und Vernunftglaube im Hochmittelalter* (Munich: C. H. Beck, 1992), 170–81, 199–211; Joan Cadden, "Science and Rhetorics in the Middle Ages: The Natural Philosophy of William of Conches," *Journal of the History of Ideas* 56.1 (1995): 1–24; Carmine Ferrara, "Creator e Natura nel *Dragmaticon philosophiae* di Giuglielmo di Conches," *Antonianum* 97 (2022): 759–90.

9 George Perrigo Conger, *Theories of Macrocosmos and Microcosmos in the History of Philosophy* (New York: Columbia University Press, 1922); cf. Rudolf Allers, "Microcosmus: From Anaximadros to Paracelsus," *Traditio* 2 (1944): 319–407; Ruth Finckh, *Minor Mundus Homo. Studien zur Mikro-kosmos-Idee in der mittelalterlichen Literatur*. Palaestra, 306 (Göttingen: Vandenhoeck & Ruprecht, 1999); Vera Rodrigues, "Microcosmus: notas sobre um velho tema," *MEDIAEVALIA. Textos e estudos*, 17–18 (2000): 21–61.

10 Osmund P. Lewry, "Study of Aging in the Arts Faculty of the University of Paris and Oxford," *Aging and the Aged in Medieval Europe*, ed. Michael M. Sheehan (Toronto: Pontifical Institute of Medieval Studies: 1990), 23–38; Luke Demaitre, "The Care and Extension of Old Age in Medieval Medicine," *Aging and the Aged in Medieval Europe*, ed. Michael M. Sheehan (Toronto: Pontifical Institute of Medieval Studies: 1990), 3–22; Luke Demaitre, "The Medieval Notion of 'Withering' from Galen to the Fourteenth Century. The Treatise on Marasmus by Bernard of Gordon," *Traditio* 47 (1992): 259–86; Jon Arrizabalaga, "Medical Causes of Death in Preindustrial Europe: Some His-

the terms 'heat' and 'moisture,' which Hugh of Saint Victor used as examples of the creative forces of nature. In particular, I will examine whether these concepts fill in the imaginary structure of causalities corresponding to the order of nature. In the last part, I will focus on a unique narrative of the causes of the plague epidemic of the 1530s. This narrative links the two previous themes through its emphasis on the concept of the age of the world (*senectus mundi*). For its focus on the causes of environmental catastrophe and its impact on human society, the fragmentarily preserved treatise by Oldřich Velenský of Mnichov (d. after 1531) will be re-read from an ecocentric perspective¹¹ with an emphasis on finding the author's sources of inspiration. The important question of the interrelationship between the order of nature and its Creator will matter critically. To round this all off, this paper will note the thematization of this relation and the conclusions that individual authors draw from them.

Human as a Microcosm

At the very end of the fourteenth century, Thomas of Štítný (d. ca. 1401–1409) completed the Czech-language work *Conversational Talks* (*Řeči besední*), describing himself in the preface as “a good man of letters” (*literát dobrý*).¹² This minor nobleman did not complete his studies at Prague University and wrote his vernacular treatises on theological and moralistic topics as didactically guided conversations between a father-teacher and children-pupils. He might be counted among the representatives of the *devotio moderna*¹³ movement not only for cultivating a

toriographical Considerations,” *Journal of the History of Medicine* 54 (1999): 241–60; Shulamith Shahar, *Growing Old in the Middle Ages* (London: Routledge, 2004); Chris Gillerard, “Ageing and the Galenic Tradition: A brief Overview,” *Ageing and Society* 35 (2005): 489–511; Albrecht Classen, “Old Age in the Middle Ages and the Renaissance: Also an Introduction,” *Old Age in the Middle Ages and Renaissance. Interdisciplinary Approaches to a Neglected Topic*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture (Berlin and New York: Walter de Gruyter, 2007), 1–84; Karine van ‘t Land, “Long Life, Natural Death. The Learned Ideal of Dying in Late Medieval Commentaries on Avicenna’s Canon,” *Early Science and Medicine* 19 (2014): 558–83.

11 For more on ecocriticism in greater detail, see Peter Barry, *Beginning Theory: An Introduction to Literary and Cultural Theory* (Manchester and New York: Manchester University Press and Palgrave Macmillan, 2009), 239–61.

12 “Byl . . . panoše jeden slovutný Tóma ze Štítného, literát dobrý, v svých letech poctivě a v svém šlechtetném životu do starosti zachovalý.” Tomáš ze Štítného, *Řeči besední*, ed. Milada Nedvědová (Prague: Academia, 1992), 13.

13 Ludvik Němec, “The Czech Reform Movement: ‘Devotio Moderna’ in the Fourteenth and Fifteenth Centuries,” *Proceedings of the American Philosophical Society* 124.5 (1980): 386–97. For

personal relationship with God, but also for his emphasis on education in an intimate circle of close persons. Through his work as a translator and compiler, this reclusive intellectual deepened the receptive capacity of late medieval Czech as a language of scholarly discourse. In the tenth chapter of the above-mentioned dialogue, he tried to formulate an answer to the question of how to grasp the magnificence of God, which by its immensity defies conceptualization. He finds the solution in the contemplation on the magnificence of God's creation, i.e., the universe which he represents as a graceful union of contradictory parts, testifying by its inner order to the wisdom of its creator.¹⁴ And it is, by emphasizing the order of nature, the basis of the harmony of the universe, that Štítný builds on the reflections of medieval natural philosophers.

Štítný presents the human body, by its very nature, as a mirror theme for such contemplations. He does so on the grounds that human is called 'the lesser world'¹⁵ in Holy Scriptures. Unlike irrational creatures, whose faces are bowed down to the ground, the human is upright in stature and turns his/her face toward the sky. This demonstrates humans' extraordinary dignity and reminds them of their duty to devote their thoughts to God. However, Štítný also finds an admirable creative intention in the overall arrangement of the individual parts of the human body, always posited in the most appropriate place for their functions. While the legs support the body from below and the head at the top receives and processes sensory input, the hands in the middle can assist the other external body parts. In Štítný's anatomical ideas, the bones run through the flesh, and through some of the bones run the passages of the brain. The bones, in the form of teeth, protrude to the surface in suitable places, elsewhere they remain hidden, protected by flesh and skin. Even individual fingers have their own protective

more on Thomas of Štítný in connection with his translations of St. Birgitta's revelations, see also Pavlína Rychterová, "The Revelations of St Birgitta in the Holy Roman Empire," *A Companion to Birgitta of Sweden and Her Legacy in the Later Middle Ages*, ed. Maria H. Oen. Brill's Companions to the Christian Tradition, 89 (Leiden and Boston: Brill, 2019), 247–69; here 254–58.

14 "A zdali i to neukazuje božie múdrosti v tom uložení a v jeden svät | tento zřejmý sjednání tak protivných věcí spolu v elementiech i hvězdách nebo v planetách . . . Aby strana jedna druhé nebořila, mají ty protivné věci sobě opět mezi sebů věc některú v prostřed . . . tiem sa smířeno . . . tak ež netoliko trpno, ale i krásno bude to spojenie v tak mnohých proměnách a v tak slušně zpořiezených." Tomáš ze Štítného, *Řeči* (see note 12), 35.

15 "Pakli jest daleké to, ješto j' tak božie milost zpořiedila aneb jeho múdrost, a nemóz kto vysokého nebe obmysliti uloženie, ale znamenaj údy těla svého – neb nazván jest člověk v písmě svät menší." Tomáš ze Štítného, *Řeči* (see note 12), 36. For more on the New Testament sources for the consideration of human as a microcosm, see Marek Kurdzialek and Hugh McDonald, "Medieval Doctrines on Man as Image of the World," *Roczniki Filozoficzne* 62.4 (2014): 205–46; here 205–06.

helmet in the form of nails. Everything is admirably shaped and placed in its proper place by the wisdom of God.¹⁶

A uniquely preserved Czech-language set of treatises called *Astrology for King John* (*Lékařství pro krále Jana*) dates from around the same time. The unknown author included not only astronomical-astrological treatises, but also texts devoted to physiological and physiognomic knowledge of the human body. The treatise on the inference of character traits from bodily features is preceded by a short introduction, noting general characteristics of the human body. The body is first compared to an upturned tree; the anonymous author finds similarities between hair on a head and roots of a tree and between limbs and branches. The author then proceeds to express the idea that the figure of the human is the only one upright among all other animals in order to demonstrate that human is to be morally straight and to direct his/her thoughts toward God and heaven.

This justification is supplemented by a commentary noting the physiological differences between the human body and that of other animals: while in the body of lower animals there is an overwhelming presence of material matter that pulls them down to the ground, in the body of human there is an unspecified heat that straightens him.¹⁷ The interpretation goes on to assert that the arrangement of the human body bears a resemblance with the created world since the width between the fingertips of outstretched hands corresponds to height from head to toe.¹⁸

The ancient notion of proportionality of the human body, expressed by a square of its basic dimensions, received a number of elaborations in the Middle Ages in the form of the concept of *homo quadratus*. Analogies to the arrangement

16 “Kak skrze některé kosti má mozk své skryté průchody . . . připravené božím způsobem! Kakt’ tu kosti . . . vynikly, kde j’ třeba toho, jakož do zubův | vidíme, a jinde jsú skryté. Kak jest vše maso koží obličeno Až i nehty dal jest jako helmy buoh každému prstu! A ktof by vše mohl počísti strany I vnitřnie těla člověčieho neb i jiného! Kak jest vše opatrnú boží múdrostí zpořiezeno, a každá má sobě hodné místo!” Tomáš ze Štítného, *Řeči* (see note 12), 36–37.

17 “Člověk jest jako strom podvrácený. Neb hlava u člověka i s vlasy jest jako kořen u stromu, totiž u stojitého dřeva, a ruce i s nohama jsú jako větvie. Jediné člověk sám ze všech živon jest znositého života na znamenie, že jakož jest přímého života, takež aby byl přímého úmysla. A také proto, aby všicku svú mysl zhuoru k Bohu do nebes nesl. A také proto, že v jiných živonách jest přieliš matery zemské, jenž dolóv tiehne, a nenie horko v nich pozdvhyhujícíe, jakož jest v člověku.” *Hvězdářství krále Jana*, ed. Alena M. Černá, Petr Hadrava, Alena Hadravová, and Martin Sluka. *Práce z dějin vědy. Studies in the History of Sciences and Humanities*, 12, Scripta astronomica, 11 (Prague: Ústav pro jazyk český AV ČR, Výzkumné centrum pro dějiny vědy AV ČR a UK, Astronomický ústav AV ČR, 2004), 91.

18 “A částky života člověčieho mají podobienstvie tohoto světa. Neb takáž šíř jest mezi dalšíma prstoma v obú rukú, jakž vysokost jest od vrchu hlavy až do pat.” *Hvězdářství* (see note 17), s. 91.

of the terrestrial world, demonstrating the correlation of macrocosm and microcosm, were found on the basis of the number four.¹⁹ Undoubtedly, the author intentionally established the information about the human dimensions with the understanding that the human body is composed of four elements. The earth materializes in bones and flesh, and water in bodily fluids, namely, blood, phlegm, and yellow and black bile. The air is in the lungs, and therefore the lungs move. The lungs are the fans of the heart so that the heart does not melt with great heat. And in the heart there is fire; hence, its lower part is broad, and the upper one pointed, having the likeness of fire.²⁰ The anonymous author the *Astrology for King John (Lékařství pro krále Jana)*, as well as Tomáš Štítný, does not hide his astonishment at the way in which parts of such different origins are harmoniously arranged in the human body.²¹

It is possible to reconstruct the content of the today lost dialogue treatise, *Microcosm (Microcosmus)*, the printing of which was repeatedly postponed by a learned nobleman, Jan Šlechta of Všebrdy (1466–1522) and was, probably for financial reasons, never published, only on the basis of mentions in the correspondence of Czech humanists.²² Shortly before his death, in a dedicatory letter to the Bishop of Olomouc, Stanislav Thurzo (1470–1530), he wrote of his work that it dealt with both parts of the human being, i.e., not only with the body but also with the soul.²³ In the context of the treatise on the soul, it can be assumed that Šlechta was working with newly available Latin translations of Plato's dialogues, and that this part of the work moralized about the dangers posed to the soul on

19 For more on the topic of *homo quadratus*, especially in ancient medical thought, see Jackie Pigeaud, "Homo quadratus. Variations sur la beauté et la santé dans la médecine antique," *Gesnerus* 42 (1985): 337–452. On medieval aesthetic concepts related to this concept, see Umberto Eco, *Art and Beauty in the Middle Ages* (New Haven, CT, and London: Yale University, 1986), 35–36.

20 "Tělo člověče jest stvořeno ze čtyř živlův. Země se ukazuje v kostech a v mase. Voda v mokrostech, totiž v krevnosti, vodokrevnosti, v pěnohorkosti, v kalostudenosti. Povětrí jest v plících, a protož plíce vždy se hýbí. Neb plíce větrník srdce jest, aby se velikým horkem nerozpustilo. A oheň jest v srdci, a protož zezpod jest široké a svrchu špičaté, maje někaké podobenství ohně." *Hvězdářství* (see note 17), 92.

21 "A tak život člověčí má rozdiel a způsob divný mezi svými údy." *Hvězdářství* (see note 17), 92.

22 Antonín Petr Šlechta, *Jan Šlechta ze Všebrdy, 1466–1525, a jeho rod. Pamětní spis k čtyřstému výročí jeho úmrtí*. Rodopisné rozhledy z pravěku do novověku, 4.1 (Prague: A. P. Šlechta, 1925), 103–05. Cf. Josef Truhlář, *Humanismus a humanisté v Čechách za krále Vladislava II*. Rozpravy České akademie císaře Františka Josefa pro vědy, slovesnost a umění v Praze 3. Series 3, no. 4 (Prague: Česká akademie pro vědy, slovesnost a umění, 1894), 99–100.

23 "Scripsi . . . dialogum quendam, cui Microcosmi nomen indidi, in quo de utraque hominis parte agitur, hoc est corpore et animae . . ." *Dva listáře humanistické*, ed. Josef Truhlář. Sběrka pramenů ku poznání literárního života v Čechách, na Moravě a v Slezsku. Group 2, Korrespondence a cizojazyčné prameny, 3 (Prague: Česká akademie pro vědy, slovesnost a umění, 1894), 93.

the way to eternal bliss by the seductions of the earthly body. However, this was certainly not conceived only in a negative way, as the title of the work shows. In a letter to Thurzo, Šlechta wrote that God had arranged humans by His marvellous art so as to gather in a small body the power and essence of all the elements under the safe guidance of nature. He had thus created a fragile shelter for the soul in the form of a mortal body, yet still similar to the universe. As the author reminds us, the ancient philosophers did not foolishly call humans the lesser world, for the person is created and built according to this visible world.²⁴ It also follows from Šlechta's words that he understood the incorporeal and immortal soul as that component of the human being which makes him/her in the image of God: humans are created not by chance and accidentally, but by God Himself.²⁵

Matyas Philomates (ca. 1550–after 1590), who in his vernacular works adapted fragments of natural philosophy of Philipp Melanchthon (1497–1560), with whom he had become acquainted during his studies at Wittenberg, also considered the structure and functioning of the human body to be evidence of the work of Divine Providence.²⁶ In the early 1570s, Philomates penned a Czech-language anatomical treatise *About the Wonderful Mill and Composition of the Human Body* (*Divná fabrika a složení lidského těla*). He apparently did not find a publisher for his theoretically conceived work, so he reworked the anatomical material into a gynaecological treatise, which was published under the title *The Rose Garden of Fertile Women* (*Zahrádka růžová žen plodných*) in 1576.

The only extant manuscript treatise on anatomy contains a passage in which the author interpreted the above-mentioned *locus communis* of the human as a creature endowed with reason. In that passage, Philomates reminds us that the God-given shape of the human body emphasizes the role of reason, which only humans, among other creatures, have been endowed with. And it is precisely because of his/her ability to reason that s/he has also been appointed as the keeper of all other creatures, although he is far from being among the greatest or stron-

24 “Deus enim, fabricator hominis, ita corpus nostrum prout ipsius mundi ex quator elementorum commixtione composuit . . . ut in parvo corpore omnium elementorum vim atque substantiam certo naturae ductu conferret, ita ut divino illi spiritui . . . quamvis fragile, simile tamen mundo paretur hospitium. Non temere igitur philosophi illi veteres hominem minorem mundum appellare voluerunt, cum instar mundi huius visibilis formatus et productus sit.” *Dva listáře* (see note 23), 95–96.

25 “. . . cuius altera pars cum incorporea et immortalis sit, verus homo existit, ad imaginem et similitudinem Dei, non fortuna et casu, sed a Deo ipso creatus.” *Dva listáře* (see note 23), 96.

26 Lucie Storchová, *Řád přírody, řád společnosti. Adaptace melanchtonismu v českých zemích v polovině 16. století* (Prague: Scriptorium, 2021), 310–15. For more on Melanchthon's relation to anatomy, see Sachiko Kikusawa, *The Transformation of Natural Philosophy: The Case of Philip Melanchthon* (Cambridge: Cambridge University Press, 1995), 75–123.

gest. Thus, the defining difference between human and animal anatomy is that while animals tilt their heads towards the earth, the human keeps his/her head erect toward the heavens. This bodily arrangement reflects the hierarchy of the entire created world. Since the human was not created for the purpose of serving the earthly world, and on the contrary, all earthly creation was made to serve him/her, s/he is to turn away from earthly affairs in his/her contemplation and approach the heavenly homeland where s/he will be given the opportunity to dwell with God and the angels in eternity.²⁷

After this introductory commentary, the author includes an enumeration of correspondences between the human body and the universe that evoke the intellectual atmosphere of twelfth-century French cathedral schools. These can be found in an almost verbatim form in the works of the medieval encyclopedist, Honorius of Autun (ca. 1080–ca. 1140).²⁸ Philomates points out that human heads are round, as is the sky or celestial sphere. In each head, there are two eyes that shine like the two heavenly lights, the Sun and the Moon. Heads are decorated with a total of seven holes, just as the seven planets decorate the celestial sphere. The chest and liver (sic), in which breath and cough mingle, resemble air in which winds and thunder roll. The abdomen receives all fluids, as a sea receives all rivers. The feet resemble the earth because they hold all the weight of the body. From fire the human has sight, from the upper air s/he has hearing, from the lower air s/he has smell, from water s/he has taste, from earth s/he has touch. S/he shares the hardness of stones in his/her bones, the vitality of trees in his/her nails, the grace of grasses in his/her hair, the sensory perception s/he has in com-

27 “Buoh nebeský . . . způsob neb figuru dosti příjemnou dal k vtípu a rozumu lidskému. Nebo všechny ty jiné tvory a tváře k zemi Buoh obrátil . . . samého toliko člověka obličej vyzvihl a tvář jeho vzhůru k nebi obrátil, aby on od zemských věcí se odtáhna . . . nebeský sobě ochutnal . . . a patřil na svou věčnou vlast . . . v kteréž s Bohem svým a se všemi anděly, duchy čistými, věčně přebývati má.” Cited in Čeněk Zíbrt, *Staročeská tělověda a zdravotvůda*. Světlo ve tmách, vol. 4 (Prague: Sfinx, 1924), 168.

28 “Caput ejus est rotundum, in coelestis sphaerae modum: in quo duo oculi ut duo luminaria in caelo micant; quod etiam septem foramina, ut septem coelum harmoniae ornant. Pectus, in quo flatus et tussis versantur, simulat aerem, in quo venti et tonitrua concitantur. Venter omnes liquores, ut mare omnia flumina recipit. Pedes totum corporis pondus, ut terra cuncta sustinent. Ex coelesti igne visum, ex superiore aere auditum, ex inferiore olfactum, ex aqua gustum, ex terra habet tactum. Participium duritiae lapidum habet in ossibus, virorem arborum in unguibus, decorem graminum in crinibus, sensum cum animalibus: haec est substantia corporalis.” *Honorii Augustodunensis Elucidarium*, ed. J.-P. Migne. *Patrologia Latina*, 172 (Paris: Garnier Fratres, 1895), 1116. Cf. *Honorii Augustodunensis Sacramentarium*, ed. J.-P. Migne. *Patrologia Latina*, 172 (Paris: Garnier Fratres, 1895), 773.

mon with animals.²⁹ In the printed treatise on gynaecology, the list became part of a treatise on the brain, where it served to develop the thesis that this organ resembles the firmament. There is also the argument there that ancient philosophers, not without reason, compared the human being to the world and called it a microcosm (*Microcosmon*),³⁰ and also the addition that people share reason and wisdom with God and the angels, which distinguishes them from animals, and at the same time likens them to the image of God.³¹

The anchoring in Melanchthon's natural philosophy is also characteristic of the Czech treatise by Simeon Partlicius (ca. 1580–after 1640),³² a graduate of the Faculty of Arts at Prague University, which was published under the title *Perpetual Economic Calendar* (*Calendarium perpetuum oeconomicum*) in 1617. In the dedicatory preface, the author urges the reader to give priority in his reflections to phenomena that are glorious and everlasting. He meant, besides Almighty God, the “garden of heavenly skies” dotted with “noble flowers in the form of stars” which God's wisdom created out of nothing but mere goodness: just like other things in macrocosm and microcosm, i.e., in both worlds – in human beings and in the orbit of the world.³³ Humans and the universe are presented as creations

29 “Hlava tehdy okrouhlá člověka k nebeské okrouhlosti, jinak obloze, podobně způsobena jest. A v ní dvě voka co na obloze nebeské dvě světla, slunce totižto a měsíc svítí. Tu hlava sedm direk neb průchodův ozdobují, jako sedm planet nebeskou oblohu okrašlují. Prsy a játry, v nichž dýchání se vobracuje, a kašel. Připodobňují se k povětrí, v němž se větrové a hromobití zbuzují. Břicho pak všechny vlhkosti jako more všechny řeky do sebe přijímá. Nohy tělo zadržují jako země. Z ohně, který jest pod oblohou, má zrak. Z svrchního větru slyšení. Z nižšího povonění. Z vody okušení. Z země má dotýkání. Účastenství tvrdosti kamení má v kostech. Ktvení stromův v nehtích. Krásu rozličných kvítí ve vlasích. Smysl pak obecný a prostý má spolu s živočichy jinými.” Zíbrt, *Staročeská tělověda* (see note 17), 168.

30 “A vpravdě ne bez příčiny staří mu|drci . . . celého člověka k světu přirovnávali a jej menším světem, totižto *Microcosmon*, nazývali, protože všech věcí podobenství na sobě nese.” Jana Ratajová and Lucie Storchová, *Děti roditi jest božské ovoce. Gender a tělo v českojazyčné babické literatuře raného novověku* (Prague: Scriptorium, 2013), 306–97.

31 “Rozum a múdrost s Bohem i anjely, neb tím se od hovaď dělí a k obrazu a podobenství Božímu připodobňuje.” Quoted from J. Ratajová and L. Storchová, *Děti* (see note 30), 307.

32 For more on Partlicius and his work, see Vladimír Urbánek, “Simeon Partlicius and his Works: Rudolfine Mood in Bohemian Exile,” *Rudolf II, Prague and the World*, ed. Lubomír Konečný, Beket Bukovinská, and Ivan Muchka (Prague: Artefactum, 1998), 291–96; see also Vladimír Urbánek, *Eschatologie, vědění a politika. Příspěvek k dějinám myšlení pobělohorského exilu* (České Budějovice: Jihočeská univerzita, 2008), 32–103.

33 “Kterýmižto slovy ponauká nás Mudřec . . . k vyhledávání věcí slavných a těch, které věčně trvají, jakož jest Bůh všemohoucí a . . . zahrádka obloha nebeská s svými ušlechtilými kvítky hvězdami. Kteréžto i jiné věci in μακροκόσμω & μικροκόσμω, na světě obojím, v člověku i v tomto okrášlu světa . . . Božská maudrost . . . z ničehéhož, z pauhé dobrotы stvořila.” Simenon Partlicius, *Calendarium perpetuum oeconomicum* (Prague: s. n., 1617), 02r–v.

of Divine Providence, which has made the human body upright. In this context, Simeon Partlicius, in accordance with the intention of the whole work, reminds us of the necessity of knowing the celestial sky and the celestial lights,³⁴ because through the operations of the heavenly bodies (*operationes coelestium corporum*), such as the eclipse of the Sun and the Moon, God communicates His signs to people. He emphasizes the role of Divine Providence by asserting that these celestial phenomena may have their natural causes, but they do not occur by chance, but by divine intervention. In contrast to philosophers who place the laws of nature above God and who would literally “make bars in heaven for Christ the Lord,” Partlicius posits an omnipotent God who intervenes in the natural order.³⁵

Natural Causes of Aging of the Human Body

The motif of the “imprisoned God” can also be found in the Czech translation of Heinrich Ranzau’s (1526–1598) *On Preserving of Health* (*De conservanda valetudine*), published in 1587 under the title *Regimen of Health* (*Regiment zdraví*) by its author Adam Huber of Riesenpach (1546–1613), a graduate of the University of Wittenberg and a teacher of Simeon Partlicius at Prague University.³⁶ Huber finds this notion absurd, for God is not bound by the laws of the movements of heavenly bodies, but He himself governs them: “Astra regit mundum, sed regit astra Deus.”³⁷ Nevertheless, the influence of heavenly bodies under the patronage of

34 “Proto jej i rovného stvořil . . . aby maje oči nahoru vyzdvížené, oblohu nebeskau a na ní světa nebeská se učil znáti.” S. Partlicius, *Calendarium* (see note 33), 0₂v.

35 “. . . Bůh . . . stěžuje hříchy světu zatmění Slunce a Měsíce . . . Ačkoliv zatmění světél nebeských, jako i jiných meteorův, přirozené příčiny se mohau dáti . . . nepřichází máním aneb náhodau, ale jistým řízením Božím. Nebo nemáme takového Boha jakého stoici v místě nějakém auzkém zavírají, a těchto časů mnozí všetýčkové Kristu Pánu mříže v nebi zdělali, ale všemohaucího . . . který netoliko Slunce, ale i vši oblohy nebeské běh může zastaviti.” S. Partlicius, *Calendarium* (see note 33), 0₃r.

36 Recently on Adam Huber, see Lucie Storchová, “Huber of Riesenpach, Adam,” *Companion to Central and Eastern European Humanism*, vol. 2, part 1 (Berlin and Boston: Walter de Gruyter, 2020), 578–85. See also Martin Žemla, “Adam Huber of Riesenpach (1545–1613) and his Translation of the Book on Regimen within the Context of the Prague Medical Milieu,” *Early Science and Medicine* 21 (2016): 531–56. For more on the relationship of Partlicius and Huber, see V. Urbánek, *Eschatologie* (see note 32), 46.

37 “Anobřž že on sám nebem a vši mocí nebesou vládne, běhu i účinkům jejich průchod dává a je, když chce, zastavuje . . . *Astra regunt mundum, sed regit astra Deus.*” Heinrich Rantza, *O zachování dobrého zdraví*, ed. Ruth J. Weiniger and Martin Žemla (Prague: Malvern, 2017), 82–83.

Divine Providence is decisive for human life. The first chapter of this treatise presents general causes of the corruptibility and decay of the human body. Second only to the original sin of the first parents, as a result of which suffering and death entered human life, is the occult power of celestial influence, which has an adverse or even harmful effect on human bodies.³⁸

A separate chapter is devoted to the so-called climacteric years, which initiate a transformation in the human body every seventh year after birth, and at the same time, with advancing age, represent an increasing health risk, caused by the periodically intensified influence of the planet Saturn.³⁹ Based on the physiological changes that culminate in each period, human life can be divided into seven-year stages. In Huber's translation, we read that in the seventh year children's teeth fall out and new ones come up, and in the fourteenth year their body begins to "grow feathers," which probably means pubic hair. When humans reach the sevenfold seven-year period, i.e., the forty-ninth year, they enter a maturity characterized by prudence and caution. The end of life inevitably approaches after reaching ten times the period, i.e., seventy years.⁴⁰

Partlicius added to the doctrine of the seven-year periods the thesis of the dominant planets, whose influence conditions the characteristic manifestations of life. The human body remains under the influence of the Moon for the first seven years and is therefore fragile and weak. In the second seven years, the influence of Mercury comes in, which is positively manifested in an increase in rational faculties. The third period blossoms into grace and discovers sexual activity that Venus brings into human life. At the beginning of the fourth period, physical growth is terminated, for the influence of the Sun sets in, introducing dryness into the human body.⁴¹ The author apparently ends the life phase of adulthood with the

38 "Druhá příčina nemocí, porušení a zkázy těl našich jest tejná jakási moc z influencí nebeské, tělům našim odporná a škodlivá . . ." Rantza, *O zachování* (see note 37), 78.

39 "Abychom pak ovšem neopomenuli mlčením let aneb roků každému tělu proměnu přinášejících a zvláště starým lidem smrtelných a nebezpečných, kteřížto *climacterici* aneb *decretorii* latinské, česky postupní aneb osudní slouti mohou . . . Příčina toho jest, že vždycky v každých sedmi letech spořádání všech planetův navraceje se k Saturnovi . . ." Rantza, *O zachování* (see note 37), 182.

40 "Odkudž bývá, že sedmého roku dětem zuby vypadají a zase jim narostají. Čtrnáctého roku pejším obrostají. A když se vyplní . . . sedm krát sedm let, totiž čtyřicátého devátého léta, již při člověku k dospělosti přichází rozum, takže bývá opatrný a věku dospělého a dokonalého. Když pak přijde k desítkrát sedmi, to jest k sedmdesáti letům, jižť jest . . . smrt nedaleko." H. Rantza, *O zachování* (see note 37), 182.

41 "Prvních sedm let jsou Měsíce, a tehdaž pacholátko poddáno jest velikým křehkostem a nemohutostem . . . Druhých sedm až do 14. jsou Merkuriášovy, a tehdaž pachole rozumu se chápá a čerstvosti. Třetích sedm let, totiž 21. jsou Venušiny, a tehdaž má květ, pěknost a k Venuši nachý-

forty-ninth year, which marks the return of the whole cycle to the Moon. The author states that after this year, all people begin to show childishness to varying degrees.⁴² The second cycle of the characteristics of each period is not closed. Partlicius notes psychological traits, gradually mentions a growing tendency to self-reflection, increased caution in behaviour, neglect of work activities and a tendency to childish behaviour. In the fourth period, covering the seventieth to the seventy-seventh year, humans are said to be trying in vain to prolong their lives; in the fifth period, ending in the eighty-fourth year, they show signs of derangement. And since this period is ruled by the planet Mars, humans become grumpy.⁴³

The aforementioned vernacular treatise *Regimen of Health* (*Regiment zdraví*) finds the influence of heavenly bodies in the qualitative and quantitative changes of the bodily humors to be hazardous. These changes bring about disease and death.⁴⁴ However, according to this treatise, the process of gradual withering of the human body is moderated by two other causes, or sets of factors. The first set is presented as natural to the human being, innate, and therefore called internal, immutably given and inevitable. It includes dryness, the increasing effect of which draws death nearer, the parallel weakening of “natural substance” and the multiplication of surplus matter.⁴⁵ The second set includes externally acting causes, therefore referred to as external causes. These include factors which human life can do without but which are difficult to avoid, such as injuries of various kinds and deaths caused by drowning or poisoning, but also factors which human life cannot do without: the degree of their use is subject to will. The list of these six everyday factors corresponds to topics known in the medical literature as the six non-naturals, or ‘things not innate’ (*sex res non naturales*). It includes air and other elements, food and drink, movement and rest, sleep and wakefulness, expulsion and retention (of excess matter), mental movement.⁴⁶

len jest. A víc již toho času neroste, nebo již přichází Slunce suchost.” S. Partlicius, *Calendarium* (see note 33), 196.

42 “Po 49. létě všickni mají nětco dětinského.” S. Partlicius, *Calendarium* (see note 33), 196.

43 “Od 70. až do 77. darmo pečuje o dlouhosti života. Od 77. až do 84. počíná blázniti a divným býti, protože Mars těch 7. let při něm panuje.” S. Partlicius, *Calendarium* (see note 33), 196.

44 “Odkudž se vlhkosti v tělech našich divně mění, rozmáhají a umenšují . . . vlhkosti pak tělích našich spravují se od moci nebeské a vrchní, z vlhkostí pak těla zlých pocházejí nemoci, z nemocí smrt a zahynutí.” H. Rantzau, *O zachování* (see note 37), 182.

45 “První vtahuje se na věci nám přirozené a přistvořené, pročez take vnitřní slovú, nezměnitelné a nevyhnutelné. A jsou v počtu tři: totižto suchota, kteráž během věku k smrti vede a přivozuje; ustavičné přirozené podstaty potracování . . . a zbytečnosti v těle rozmnožení.” H. Rantzau, *O zachování* (see note 37), 80.

46 “Druhá příčina vztahuje se na věci zevnitř případné, kteréž také zevnitřní slovú . . . některé jsou nepotřebné . . . když na nás nenadále připadají, těžce se jich uvarovati můžeme: jakož je těla

The definition of health, presented in the next chapter, follows the explanation of the internal factors of physical withering. The desired state, likened to integrity and freshness, is to be conditioned by a balanced ratio of the two components of bodily nature, namely heat and moisture. People possessing a greater amount of heat and moisture live to an older age, while people of the opposite nature, i.e., colder and drier, age and die earlier.⁴⁷ Although different terminology is used, the definition appears to be compatible with the previous concept of internal factors. While drying out the body accelerates withering, sufficient moisture keeps the body healthy and long-lived. At the same time, the loss of moisture is accompanied by a weakening of 'natural substance', which in the definition of health is represented by the quality referred to as 'heat.'

In the discourse of Czech language medical treatises, the concept of health as an effect of the interaction of 'heat' and 'moisture' is supported by the treatise called *The Rule of Health of Human Composition* (*Pravidlo zdraví lidského složení*), which was first published separately in 1544 and then four more times by the end of the sixteenth century as part of a convolute of medical texts called *Medical Books* (*Lékařské knížky*). Both printed works, the treatise itself and the convolute, were mistakenly attributed to Christian of Prachatice (ca. 1360–1439), a prominent scholarly authority at Prague University during the reign of the last rulers of the Luxembourg dynasty.⁴⁸ Despite the disputed authorship of Christian, the origin of *The Rule of Health of Human Composition* can be linked to the environment of Prague University, as it contains not only practically oriented advice, but also fragments of theoretical knowledge of scholastic medicine.

našeho radění . . . item když se někdo v vodě utopí, aneb jedem otráven bývá. Jiné opět věci jsou potřebné a nuzné . . . a nadile jsou v moci a volení našem. Jakož jest tato věc šestera . . .” H. Rantza, *O zachování* (see note 37), 80–81. For more on the genesis and development of *res non naturales*, see Saul Jarcho, “Galen’s Six Non-Naturals. A Bibliographical Note and Translation,” *Bulletin of the History of Medicine* 44.4 (1970): 372–77; Peter H. Niebyl, “The Non-Naturals,” *Bulletin of the History of Medicine* 45.5 (1971): 486–92; Luis García-Ballester, “On the origin of the „six non-natural things in Galen,” *Galen und das hellenistische Erbe. Verhandlungen des IV. Internationalen Galen-Symposiums 18.–20. September 1989*, ed. Jutta Kollesch and Diethard Nickel. Sudhoffs Archiv, Beihefte 32 (Stuttgart: Franz Steiner Verlag, 1993), 105–15.

47 “. . . zdraví jest celost a čerstvost těla a mírného složení přirození jeho z horkosti a vlhkosti . . . ti, ješto mají mnoho horkosti a vlhkosti, dlouho také živi bývají, zase kteříž jsou odporného přirození, totiž studení a suší, ti se dřívěji zastarají a umírají.” H. Rantza, *O zachování* (see note 37), 87–88.

48 For more on the issue of Christian’s alleged authorship of both works, see Dana Stehlíková, *Od andělky po zimostráz. Latinský Herbář Křišťana z Prachatic a počátky staročeských herbářů* (Brno: Centrum pro studium demokracie a kultury, 2017), 61–65.

Besides the title itself, accentuating the issue of physiology of the human body, this is evidenced by the first chapter, in which human life is compared to a lamp. Its functionality is ensured by a burning wick, and also by the oil that saturates the wick, allowing it to burn. The lamp is extinguished when the wick and oil burn out naturally.⁴⁹ However, various adverse circumstances can also cause the lamp to go out unnaturally. If there is too much oil, the wick drowns in it, if the wick is too long, it uses up its oil quickly, if the lamp is blown out by the wind or broken by a thrown stone, the burning is prematurely ended.⁵⁰ With this initial explication, the author aims at claiming that the duration of human life depends on the duration of innate heat and innate moisture.⁵¹ The author then uses the lamp metaphor to illustrate model case studies: too much food and drink can end life prematurely by extinguishing innate heat, just as too much oil will extinguish the lamp. As the lamp is shattered by the thrown stone, so human life is prematurely ended by a fatal injury. Even the example of the disease called phthisis (*souchotiny*), causing premature drying of innate moisture, can be read through the prism of the lamp whose oil is prematurely burned by an intense flame. Finally, the effect of perniciously unhealthy air on human life can be compared to the lamp extinguished by a gust of wind.⁵²

The origins of the use of the image of the burning lamp as a metaphorical expression for human life can be traced in the works of classical antiquity; medieval authors adapted this *locus communis* as a discursive device to explain physiological processes such as growth or aging. In addition to the concept of innate heat (*calor naturalis*, *calor innatus*, *calidum naturale*), they also relied on the concept of radical moisture (*humidum radicale*, *humiditas radicalis*). In this analogy, innate heat is identified with the fire of the burning lamp, and radical moisture with the fuel that is consumed by this fire. As a result of the reception of trans-

49 "I máš znamenati, že v té lampě jest dvojí věc: Jedna jest knot, který hoří, druhá věc jestiť olej, ješto ten knot zapálený krmí . . . A když knot a olej dohoří, tehdy lampa zhasne." *Lékařské knížky Mistra Křišťana z Prachatic z mnohých vybrané*, ed. Zdeňka Tichá (Prague: Avicenum, 1975), 165–66.

50 ". . . neboť se přichází, že olej přesáhne míru knotu hořícího . . . takž knot utone v oleji a zhasne . . . Někdy také bude knot velmi veliký, hoře tak, že oleje nemaje, pokrmu, brzo zhasne. Někdy vítr lampu uhasí, někdy kámen nebo jiná věc některá lampu zhasí, takže . . . před cílem uloženým zhasne." *Lékařské knížky* (see note 49), 166.

51 "Dokavadž ta horkost a mokrost přirozená trvá, dotud život člověčí trvá." *Lékařské knížky* (see note 49), 166.

52 "Oni pro veliké a neřádné jídlo a pití, pro něžto horkost přirozená v nich uhasne, jako lampa pro mnoho oleje proti knotu . . . Onen bude zabit jako lampa kamenem rozbitá . . . onen suchotinami, jimiž se mokrost životní dříve času vysuší, jako lampa velkým plamenem, onen zlým povětrím mokrým jako lampa větrem zhasne." *Lékařské knížky* (see note 49), 167–68.

lations of the works of Arabic authors, especially Avicenna's *Canon of Medicine* (*Canon medicinae*), radical moisture began to be interpreted as a substance that is the product of the final, fourth stage of digestion. Seen in the metaphor of the lamp, the fibres of the wick, representing body tissue, are saturated with this very substance. The oil in which the wick is immersed in the lamp became associated with the moistures generated by the body during the previous stages of the food digestion process.⁵³

Thus, it is in the context of this knowledge that it is necessary to interpret the explication of innate heat and radical moisture given by the university-educated physician Johannes Kopp of Raumenthal (1487–1558) in his Czech treatise *Thorough and Perfect Regimen of Health* (*Gruntovní a dokonalý regiment zdraví*), published in print in 1536.⁵⁴ In accordance with the medieval translations of Galen's *On the Preservation of Health* (*De sanitate tuenda*),⁵⁵ the author argues that in order to maintain health, it is necessary to follow a regimen of replenishment of nutrients consumed by bodily processes and internal purification through the expulsion of waste products of the digestive process.⁵⁶ The author identifies bodily processes with innate heat, which causes the daily loss of body tissues.⁵⁷ Undigested food is perceived as a health hazard because it can interfere with the functioning of the body's organs. Elsewhere, the author compares innate heat to fire:

53 For a detailed discussion of the development of interpretations of these concepts, see Peter H. Niebyl, "Old Age, Fever, and the Lamp Metaphor," *Journal of the History of Medicine and Allied Sciences* 26.4 (1971): 351–68; Thomas S. Hall, "Life, Death and the Radical Moisture. A study of Thematic Pattern in Medieval Medical Theory," *Clio Medica* 6 (1971): 3–23; Michael McVaugh, "The 'humidum radicale' in Thirteenth-Century Medicine," *Traditio* 30 (1974): 259–83; Michael Stolberg, "Die Lehre vom 'calor innatus' im lateinischen Canon medicinae des Avicenna," *Sudhoffs Archiv* 77.1 (1993): 33–53; Chiara Crisciani, "Physicians and Radical Moisture: *vita longa?*," *A Question of Life and Death. Living and Dying in Medieval Philosophy*, ed. Jean-Michel Counet (Turnhout: Brepols Publishers, 2022), 107–28.

54 For more on the author and his work, see David Tomíček, "The Concept of Good Life According to the Kings's Physician Johann Kopp von Raumenthal," *Gutes Leben und guter Tod von der Spätantike bis zur Gegenwart. Ein philosophisch-ethischer Diskurs über die Jahrhunderte hinweg*, ed. Albrecht Classen. Theophrastus Paracelsus Studien, 4 (Berlin and Boston: Walter de Gruyter, 2012), 309–16.

55 Dana Stelíková, "Illud corpus est unum singulare: Životospráva lékaře Reimbota Eberhardi de Castro pro císaře Karla IV.," *Listy filologické* 134.1–2 (2011): 69–80.

56 "Nejprve znamenaj, že zdraví . . . dvěma kusy byva, totižto slušným nahrazením neb navracením toho, což jest člověku ubylo aneb se pokazilo, druhé zachováním počistování neb vyhnání zbytečností." Johannes Kopp of Raumenthal, *Gruntovní a dokonalý regiment zdraví* (Prague: Jan Had, 1536), 4v.

57 "Takto že den ode dne vždycky životu našemu skrze přirození horkost nětco ubyva . . ." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 4v–5r.

constant movement, burning and smouldering are immanent to it.⁵⁸ Innate heat, which has its material origin in the mixture of semen and blood, is the formative factor of bodily growth from the moment of conception because of the analogous immanent attraction. Moreover, according to Kopp, the action of innate heat is conditioned by the environment of certain initial innate moisture, the material origin of which is identical.⁵⁹ And it is from the words about the exceptional material nature of this initial moisture that it can be deduced that the author adapted the concept of radical moisture into his physiological knowledge, although he identified innate moisture, in the interpretation of the lamp metaphor, with oil acting as fuel for innate heat.⁶⁰

An interpretive clue to this simplification of the problem of radical moisture reveals Kopp's understanding of the lamp wick as organs of the human body. Just as a well-made wick is essential for a clear burn in addition to pure oil, properly functioning bodily organs are essential for the full effect of innate heat.⁶¹ The author's conception of the basic physiological process and its factors is therefore more complex. Innate heat causes a loss of innate moisture in body tissues, which is returned to these tissues as a result of the multi-stage digestion of ingested food. However, this digestion process can be disturbed by various dietetic errors, which the author demonstrates with the example of the lamp and its oil as a model case study. However, it is the oil that saturates the wick enabling the burning, with the brightest burn guaranteed by the wick fully saturated with pure oil. Kopp, however, means the body organs by the wick, and these are the places where innate moisture is consumed by innate heat. Oil, in his concept, is therefore innate moisture only in the sense of the product of the last stage of digestion of ingested food.

The bodily organs grow, gain shape, and enlarge through the action of innate heat. In the earliest stages of human life, this process is easy, as the body tissues

58 "Tak, že přirozena horkost nijakž nemuož zahaleti, jakož pak na každem ohni vidíš, že se vždycky hybe a plamen neb dym z sebe vypaustí." Kopp of Raumenthal, *Gruntovní a dokonaly regiment* (see note 56), 5r.

59 "Ta přirozená horkost . . . vždycky bez přestání usiluje a pracuje v přirozené vlhkosti, kteráž z svrchu dotčených dvů kusuov, totiž semena a krve vzešla jest . . ." Kopp of Raumenthal, *Gruntovní a dokonaly regiment* (see note 56), 5v.

60 ". . . rovně jako oheň nebo světlo v lampě oleje užívá a tím se živí, tak také tau přirozenau vlhkostí svrchu jmenovaná horkost chova a živí se . . ." Kopp of Raumenthal, *Gruntovní a dokonaly regiment* (see note 56), 5v.

61 ". . . rovně jako světlo v čisté oleji, jestliže je knot dobrý, jasně . . . hoří, tak také bývá přirozená horkost silná a čerstvá . . . pak po knotu máš rozuměti auduov člověka, jestliže Ti dobře zpusobení a zformovaní sú." Kopp of Raumenthal, *Gruntovní a dokonaly regiment* (see note 56), 5v.

have enough innate moisture in them. Growth stops when it reaches its natural limits, determined by the ratio of the two basic physiological factors. Innate heat causes the body tissues, especially the bones, to dry out, harden and they begin to resist formative action.⁶² The end of the growth process is reached when the body tissues are so dry at an advanced age that innate heat has no effect in this respect. However, it still continues to benefit bodily functions in residual innate moisture.⁶³ Death occurs when innate heat – identified by the author with the phenomenon of life itself – is extinguished in the body.⁶⁴

Kopp understands the aging process as a gradual transformation of basic body qualities conditioned by the loss of innate heat and innate moisture. For this reason, he relies on the fourfold periodization formula, presented as Avicenna's, although he mentions other periodization possibilities in passing.⁶⁵ This formula became widespread in the high Middle Ages in connection with the distribution of the Latin translation of the treatise *Introduction to Galen's Tegni (Isagoge ad Techne Galieni)*, which the Western tradition attributed to Johannicius. The four successive human ages are designated here as 'adolescence' (*adoslescentia*), 'youth' (*iuventus*), 'old age' (*senectus*) and 'extreme old age' (*senium*).⁶⁶ Kopp chooses these terms for these life stages: "age of growth," "age of stability" or more precisely "age of rest," "age of becoming old" and "extreme old age."⁶⁷ As far as the delineation of different life stages is concerned, Kopp remains in agreement with the Johannitian interpretation, as revealed by the already extremely long conception of the first life stage, covering the entire period of physical growth up to the age of twenty-five or

62 "Těž take on svau mocí neb usilováním ty audy dlúho až člověk v svú vyměřenú měru a přirozenú postavu vyroste Dokud sú audové ve mládí ještě . . . tekuté vlhkosti blízci, snadně se mohau rozno tisknutí . . . čím člověk starší jest, tím jest tvrdší i take suší, takže různoruosti kosti i jiní audové neposlušni a nepovolní bývají." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 5r.

63 "I obrátí se sama v sebe a v ty vlhkosti života, v kterýchž (dokud jich stava) přebývá" Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 5v.

64 ". . . tudy celý život a všickni audové se hýbí a rostau, a to jest sám život, když to zhasne, tehdy jest život take zhasil." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 5v.

65 "Protož ty všecky jiné na stranu položím a toliko umysl a zdání Avicenny . . . předsevzíti chci, kdež praví, že věkové lidští jsú čtveří" Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 16v.

66 "Quattuor sunt aetates, i. adolescentia, iuventus, senectus et senium" Cited in Gregor Maurach, "Johannicius: Isagoge ad Techne Galieni," *Sudhoff's Archiv* 62.2 (1978): 148–74; here 155. Cf. different English translation *Medieval Medicine. A Reader*, ed. Faih Wallis (Toronto: University of Toronto Press, 2010), 143.

67 ". . . rostací věk, odpočívající aneb stojící, pak scházející věk a naposledy starost" Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 16v.

thirty.⁶⁸ Growth is made possible by the prevailing heat and moisture that is characteristic of the body at this stage of life. In the second stage, moisture is disappearing and the body is described by Kopp and Johannicius as hot but already dry.⁶⁹

This second period is conceived as very short, ending at the age of forty. Kopp adds that in both the first and second half of life, the lengths of the two stages may be in different proportions, as people mature and age at different rates.⁷⁰ The physiological change separating the two halves of life is the beginning of gradual extinction of innate heat. Thus, in everyday life, the onset of the third stage brings all sorts of health complications, initially less serious. The characteristic that this period is cold and dry compared to the first two, but still hot and moist compared to the next two, captures its essence.⁷¹ Its end comes at the age of sixty and later. The last stage is already marked by the approach of death; the visible withering of the body is manifested by its hunching and shriveling.

The internal disposition is becoming increasingly cold and dry.⁷² Kopp points out, however, that this increasing dryness is only related to innate dispositions, and that the old body, on the other hand, is rather moist, due to an abundance of unnatural moisture.⁷³ This unfortunate condition must be attributed to the increasingly difficult bodily processes, especially digestion and excretion. In this context, the author states that the nature of people of extreme old age is contrary to life and health and corresponds to Galen's concept of 'neutrum', which was used in medical texts to refer to a physical disposition perceived as neutral, i.e.,

68 "... rostaucí věk trvá skuoro až do třidceti let, ale ten věk vykonává se obyčejně při nás v pětmecitna letech . . ." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 16v. Cf. "Adolescentia . . . usque ad vicesimum quintum vel tricesimum annum." Maurach, "Johannicius: Isagoge ad Techne Galieni" (see note 66), 155.

69 "... a ten věk v horkosti trvá a srovnává se s rostaucím věkem, a býtá sušší než ten . . ." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 16v. Cf. "Hanc iuventus insequitur, quae calida est et sicca . . ." Cited in Maurach, "Johannicius: Isagoge ad Techne Galieni" (see note 66), 155.

70 "A ačkoliv . . . učitelé takovy rozdíl věkuov činí, ale však první i druhý věk v jednom déle aneb méně trvá, též také v posledních dvou v jednom prvé a v druhém později, podle jednoho každého přirození . . ." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 17r.

71 "... a ten věk odevšech lékařů za studený a suchý se poklada, jestliže se těm dvěma nahoře položeným věkom rovná, jestliže pak poslednímu se rovná, tehdy se teplejší a vlhčejší naleza nežli ten." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 17r.

72 "Čtvrtý pak a poslední věk, v kterýmž se člověk shrbí a svraskne . . . trvá až do smrti . . . v ten čas byvá člověk nejstudenějšího a nejsuššího přirození," Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 17r.

73 "... život starých lidí vlhký, měkký a studený jest, to máš rozuměti o případnosti nepřirozené vlhkosti, ale vedle přirození sú studení a sušší." Kopp of Raumenthal, *Gruntovní a dokonalý regiment* (see note 56), 57v.

neither ill nor healthy.⁷⁴ This has necessary implications for the dietetic regimen of such people, for what would do no harm to a young person poses a literally fatal risk to an old person.

***Senectus Mundi* and the End of the World**

The humanistically educated publisher and translator Oldřich Velenský of Munich, also known as Ulrichus Velenus Minihoniensis, based his interpretation of pernicious manifestations of the age of the world (*senectus mundi*) on the view of the universe as a macrocosmic mirror of the human being. His Czech-language treatise on plague, published posthumously in 1538, survived without a title page and without the first printed sheet with a supposed preface. Therefore, it is not easy to fully understand not only the author's intention, but also the various interpretative levels of the work, which is attributed the title *A Treatise on How a Man Can Flee from Plague (Spis, že člověk může před morem ujíti)*.⁷⁵ Although the title implies primarily ethical issues of plague prophylaxis, to which the author does indeed refer, recent research has also drawn attention to his being able to find the origins of a plague epidemic in the climatic changes of the terminal stage

74 “. . . přirození . . . životu a zdraví na odpor jest . . . ani zdravé, ani nezdravé . . . již Galenus Neutrum, totiž ani to, ani ono, praví.” Kopp of Raumenthal, *Gruntovní a dokonaly regiment* (see note 56), 57v. For more on the humanistic discussion on the physical disposition of the elderly as ‘neutral’, see Timo Joutsivuo, *Scholastic Tradition and Humanist Innovation. The Concept of Neutrum in Renaissance Medicine* (Helsinki: Academia Scientiarum Fennica, 1999), 180–90. For more on the concept of old age as a disease, see Daniel Schäfer, “‘That Senescence Itself is an Illness’: A Transitional Medical Concept of Age and Ageing in the Eighteenth Century,” *Medical History* 46 (2002): 525–48.

75 Oldřich Velenský z Mnichova, [*Spis, že člověk může před morem ujíti*] [Prague: Jan Severýn, 1538]. Velenský's treatise is preserved in a unique printed copy without title page. The original title of the work is therefore unknown. The title in square brackets was created by the scholar Josef Jungmann. It is still used in Czech literary historiography. For details, see Josef Jungmann, *Historie literatury české, aneb, Saustavný přehled spisů českých s krátkou historií národu, osvětlení a jazyka* (Prague: nákladem Českého museum, 1849), IV.892. See also Antonie Jan Lamping, *Ulrichus Velenus (Oldřich Velenský) and his Treatise Against the Papacy*. Studies in Mediaeval and Reformation Thought, 19 (Leiden: Brill, 1976), 69. See also Petr Voit, *Encyklopedie knihy: starší knihtisk a příbuzné obory mezi polovinou 15. a počátkem 19. století* (Prague: Libri, 2008), 985–86; Emil Pražák, “Oldřich Velenský a cesta českého humanismu k světovosti,” *Česká literatura* 14.5–6 (1966): 443–58; F. M. Bartoš, *Zapadlé dílko bratrské vědy* (Prague: Královská česká společnost nauk, 1925).

of universal history.⁷⁶ The interconnection of this unusual interpretation of the causes of a plague epidemic with eschatological visions and prophecies about the end of the world has remained unnoticed until now.⁷⁷

Without specifying this idea in relation to the diseases of the distant past, Oldřich Velenský attributes a distinctly different character to recent epidemics. He sees them as afflictions that manifest an “aging world” that is literally “coming to an end.”⁷⁸ That the world will be afflicted with such ills can be evidenced by Christ’s words about the signs of the end of the world, which also include plague epidemics. References to specific chapters from the Gospels of Matthew and Luke are given as marginal headings in Velenský’s work. The author uses them to refer to the discourse of the Christian apocalypse, whose means include the evocation of earthquakes, famines and pestilences in various places (Matt 24:7; Luke 21:11).⁷⁹ Referring to the words of the First Epistle to the Corinthians, Velenský reminds us that if the author was already aware of the imminence of the end of the world, these events are certainly no less relevant a millennium and a half later. What was foretold by Christ is now being fulfilled more successfully. And it is in this context that the author refers to the concept of the aging world for the second time when he claims that the world has undoubtedly reached its old age and decay, as can be demonstrated by the example of humans.⁸⁰

76 Lucie Storchová, *Řád přírody, řád společnosti. Adaptace melanchtonismu v českých zemích v polovině 16. století* (Prague: Scriptorium, 2021), 316. See also Filip Hrbek, “Czech-Written Prints on Plague: 16th Century,” *Plague between Prague and Vienna. Medicine and Infectious Disease in Early Modern Central Europe*, ed. Karel Černý and Sonia Horn (Prague: Academia, 2018), 26–72; here 56–58; David Tomíček, “On the Subject of Microcosmos in Czech Medical Literature of the 16th Century,” *Anthropologie* 48.2–3 (2010): 29–23.

77 For more on the basic terminology, see Richard Landes, “Millenarianism/Millennialism, Eschatology, Apocalypticism, Utopianism,” *Handbook of Medieval Culture. Fundamental Aspects and Conditions of the European Middle Ages*, vol. 2, ed. Albrecht Classen (Berlin and Boston: Walter de Gruyter, 2015), 1093–112.

78 “Ale tato přímoří a morové, kteříž za našeho věku i před námi již nemálo let dějí se, jsú s věcí strany scházějícího světa a k svému skončení blížícího se, neduhové.” Velenský, [Spis] (see note 75), D_{2v}.

79 Laura A. Smoller, “Of Earthquakes, Hail, Frogs and Geography. Plague and the Investigation of the Apocalypse in the Later Middle Ages,” *Last Things, Death and the Apocalypse in the Middle Ages*, ed. Caroline Walker Bynum and Paul Freedman (Philadelphia, PA: University of Pennsylvania Press, 1999), 156–87. For more on the apocalyptic ideas in previous ages, see also James T. Palmer, *The Apocalypse in the Early Middle Ages* (Cambridge: Cambridge University Press, 2014). See now also the contributions to *The End-Times in Medieval German Literature: Sin, Evil, and the Apocalypse*, ed. Ernst Ralf Hintz and Scott E. Pincikowski. Studies in German Literature, Linguistics, and Culture (Rochester, NY: Camden House, 2019).

80 “A poněvadž Apoštol za věku svého pravil, že již končiny světa přišly, ovšem víc než po puol druhým tisíci let skonání světa blížší jest, a to, což Kristem předpovědíno, plní se zřetelněji. A že

Velenský bases his instruction about the manifestations of human aging on the authority of Greek natural philosophy. By way of introduction, Velenský notes that the Greeks called the universe macrocosm, i.e., the larger world, and the human being microcosm, i.e., the lesser world, because of their similarity in organization.⁸¹ The understanding of physiological processes of the human body is based on the concept of innate heat, which guarantees the flawless functioning of the human body by burning off all harmful moistures. When that happens, humans not only sleep well and digest well, but can rely on the sharpness of reason, the durability of memory, the strength of will and the infallibility of the five senses.⁸² However, when humans reach old age, or rather extreme old age, which corresponds to the last stage of life known as *senium*, associated with physical and mental decline,⁸³ all of the above abilities diminish. The increasingly less intense innate heat is no longer able to eliminate harmful moistures that are causing more and more chronic diseases and other health ailments in the body.⁸⁴

Velenský finds an analogy to human youth in the first periods of the world's existence, when the Sun, the Moon, and the other planets worked reliably for the benefit of people and all other animals by divine guidance. By the influence of their powers, they pulled all pollutants out of the air, thus benefiting the earth's crops. The harmonious cycle of the universe was manifested by the regular change of seasons with corresponding weather.⁸⁵ Under such conditions, the people of that time were healthy, fit, strong, and extremely long-lived, as evidenced

světa starost a sešlost v posledním již věku přišla, příkladem člověka ukázáno býti může." Velenský, [Spis] (see note 75), D₂v.

81 "Pro kteréžto podobenství světa k člověku a člověka k světu svět Macrocosmos, to jest větší svět, a člověka Mikrokosmos, tj. menší svět, Řekové nazvali." Velenský, [Spis] (see note 75), D₂v.

82 "Neb všecko přirozená horkost mocně sžírá a vypaluje, A z toho . . . rozum ostrý, paměť držebná, vuole chtivá, též zrak, sluch, čich, čitedlnost, okušení, všecko neomylné a jisté." Velenský, [Spis] (see note 75), D₃r.

83 For more on medieval reflection on physical and mental decline in extreme old age, see Shahar, *Growing Old* (see note 10), 36–59.

84 "Ale když v starost ovšem a poslední věk a sešlost přijde . . . potom přijdou pro zbavení horkosti přirozené, nébrž všeho přirození pádu, flusy a vlhkosti škodlivé a z nich v těle ustavičné nemoci a kvokání, a to čím dál tím více." Velenský, [Spis] (see note 75), D₃r.

85 "Tak v světě rovně za prvních věků Slunce, Měsíc i všechny planěty . . . Božským způsobením přisluhují . . . co by v povětří škodlivého nacházelo se, mocně vytahující . . . úrody zemské . . . přivodíce. Neb všickni roku rozdílové . . . v své váze v svém počasí ustavičnost zachovávali." Velenský, [Spis] (see note 75), D₃v.

by their well-preserved bones. Such bones and teeth, Velenský believes, are also found in Bohemia.⁸⁶

It seems possible that Velenský was indeed informed about some particular discovery of remarkably large skeletal remains, which naturally attracted the attention of his contemporaries. Václav Hájek of Libočany (d. 1553), in his printed *Czech Chronicle* (*Kronika česká*) of 1541, reports that in the Central Bohemian locality of Tetín, a human skull of such a size was discovered that it was almost impossible for two adult men to embrace it, and lower limb bones of a cumulative length of twenty-six feet were unearthed from the ground. The excavations were allegedly put on display in the local castle.⁸⁷ Hájek dates this event to the year 785, which is hardly believable. The discovery was certainly of a much younger date and the chronicler could have been informed of it literally at first hand. In the years 1533–1539, Hájek actually worked as a parish priest in Tetín.⁸⁸ The finds of giant bones and teeth as big as a human fist or head in the Moravian locality of Předmostí near Přerov were mentioned by Jan Blahoslav (1523–1571) in his work *Czech Grammar* (*Gramatika česká*), printed in 1571.⁸⁹ A century later, the scholarly Jesuit, Bohuslav Balbín (1621–1688), in his *Miscellany from the History of the Bohemian Kingdom* (*Miscellanea historica regni Bohemiae*) put forward a more rational interpretation of similar finds. Referring to the work of Daniel Sennert (1572–1632), he states that the curious horns and skeletal finds found in Bohemian caves represent the result of nature imitating animals. However, people believe – as in the case of the ribs, hips, and other bones exhibited in the North Bohemian monastery of Osek (Ossegg) – that these are the bones of giants who once inhabited these places.⁹⁰ Balbín also states, concerning excavations from the Prague

86 “A protož lidé těch věků urostlí, zdraví, silní a převelmi dlouhověcí bývali. Jichžto mnohých kostí do dnešního dne porušení neberou, jakož hnátové a zuby jích i u nás v Čechách nacházejí se.” Velenský, [Spis] (see note 75), D4r.

87 “Člověk jeden ve městě Tetíně . . . kopal a nalezl hlavu člověčí nesmírné velikosti . . . dva muži jedva ji mohli obsáhnouti. Nalezeny jsou přitom i jiné kosti, jednak všechny jednoho člověka hnátové noh byli jsou na dvacet a šest noh zdýli. A to všecko bylo na hrad Tetín přineseno a pověšeno na jedné síni a všem lidem, kteříž tam přišli, ukazováno.” Václav Hájek z Libočan, *Kronika česká*, ed. Jan Linka (Prague: Academia, 2013), 101.

88 Václav Flajšhans, “Kněz Václav Hájek z Libočan,” *Václava Hájka z Libočan Kronika česká*, ed. Václav Flajšhans. Staročeská knihovna, 2 (Prague: Akademie císaře Františka Josefa pro vědy, slovesnost a umění, 1918), VII.

89 “Ještě veliké kosti obrův v vršku pod skalkou předmostskou vykopávají; zuby tak veliké jako pěst, jako hlava člověčí etc.” *Gramatika česká Jana Blahoslava*, ed. Mirek Čejka, Dušan Šlosar, and Jana Nechutová. Spisy filozofické fakulty, 285 (Brno: Masarykova univerzita, 1991), 179.

90 “Addit idem ille Sennertus, in Bohemia non modo cornua, sed aliorum plurimum etiam ignorantum animantium, velut ossa in perfossis montibus inveniri, eandemque de iis esse rationem, natura etiam in his sensu carentibus, studiose animantes, vel figuris cum aliter non datur, imi-

monastery Břevnov, that the supposed bones of giants were examined by sight and touch by two Jesuit fathers from the Prague college to conclude that they are not stone remains of giants, but real bones, virtually skull, joints and ribs, such as humans have today.⁹¹

Velenský does not interpret the unusual skeletal finds as a freak of nature or the bodily remains of giants. He sees them as proof of the fact that thanks to a healthy climate and sufficient nutrition, people in ancient times were healthy, well-grown, and long-lived. He does not explicitly state that the bones found were exceptionally large, but that they were preserved intact.⁹² In addition to reflecting on local finds, he was also able to draw on textual tradition. The finds of bones, in connection with human longevity, are discussed, for example, already by Augustine of Hippo (354–430) in the fifteenth book of his famous work, *The City of God* (*De civitate Dei*). People of higher stature had lived, in his opinion, in ancient times and certainly before the Flood. Doubters can be convinced of this by the discovery of old sepulchres, which contain dead human bones of incredible size. The author recalls how, together with other people, he saw with his own eyes a human molar about the size of a hundred molars of his contemporaries.⁹³ He reasoned that the molar did not necessarily belong to a giant, for in those days even human beings had virtually enormous bodies. He finds support for this claim in Pliny the Elder's

tante, ac ludente. Ejusmodi ossa, gigantum costas, coxendices et plura alia experimentia, in Ossensi Monasterio . . . pendentia monstrantur et vulgo gigantum, qui ea loca incoluerint, ossa creduntur." Bohuslaus Balbinus, *Miscellanea historica Regni Bohemiae* (Prague: Georgius Czernoch, 1679), 114. As to contemporary reflections on the destiny of giants in the past, see the contribution to this volume by Nurit Golan.

91 ". . . videre et tetigere ossa . . . duo Patres nostri e Collegio Pragensi, neque saxeum quidquam in gigante, sed vera, qualia nunc sunt hominum ossa, cranium, articulos, costas compererunt" Balbinus, *Miscellanea* (see note 90), 114.

92 ". . . porušení neberau" Velenský, [*Spis*] (see note 75), D4r.

93 "Quanto magis igitur temporibus recentioribus mundi, ante . . . diluvium? Sed de corporum magnitudine plerumque incredulos . . . sepulcra convincunt, ubi apparuerunt . . . incredibilis magnitudinis ossa mortuorum. Vidi ipse non solus, sed aliquot mecum . . . molarem hominis dentem tam ingentem, ut si in nostrorum dentium modulos minutatim concideretur, centum nobis videretur facere potuisse." *Sancti Aurelii Augustini hipponensis episcopi De civitate Dei libri XXII*, ed. J.-P. Migne. *Patrologia Latina*, 41 (Paris: venit apud editorem, 1845), 448. For more on the context of the fifteenth book, see Jonathan P. Yates, "Books 15 & 16. Genesis, Paul, and Salvation History for the Citizens of God's City," *The Cambridge Companion to Augustine's City of God*, ed. David Vincent Meconi (Cambridge, UK: Cambridge University Press, 2021), 188–210. See also James M. Dean, *The World Grown Old in Later Medieval Literature*. Medieval Academy Books, 101 (Cambridge, MA: The Medieval Academy of America, 1997), 82.

thesis that nature creates ever smaller bodies as the world progresses.⁹⁴ In connection with Velenský's characterization of the bone finds, Augustine's assertion that the size of former bodies is usually attested by the bones found, because they do not easily decay, attracts attention.⁹⁵ This causal connection is not so clearly expressed in Velenský's work, but it seems possible that the relevant passage from *The City of God* (*De civitate Dei*) was his source of inspiration.

Augustine further notes that unlike the enormity of their bodies, the debated longevity of the people of that time cannot be ascertained from any such material evidence.⁹⁶ This skeptical statement confirms that Augustine understood nature and matters of natural inquiry as the sum of visible things.⁹⁷ Human longevity, according to his interpretation, remains attested by the testimonies of Holy Scripture, which the Bishop of Hippo analyzes in the following chapters. Similarly, Lothar of Segni (1161–1216), later Pope Innocent III, in his work *On the Misery of the Human Condition* (*De miseria conditionis humanae*), notes that it could be read that in the beginning humans lived to be over nine hundred years old.⁹⁸ Further development of the shortening of human life to its present limit is documented in agreement with the Old Testament comments. In contrast, Otto of Freising (ca. 1114–1158), in his *Chronicle or the History of the Two Cities* (*Chronica sive Historia de duabus civitatibus*), chose a different strategy and recalled the words of Josephus Flavius (ca. 37–ca. 100) that people before the Flood had lived a long life thanks, among other things, to a suitable diet.⁹⁹

The natural history rationale for shortening human longevity was put forward by Roger Bacon (1214–1294) in his works. In *The Book of Six Sciences* (*Liber sex sci-*

94 "Plinius Secundus, doctissimus homo, quanto magis magisque praeterit saeculi excursus, minora corpora naturam fere testantur." *S. Aurelii Augustini hipponensi episcopi De civitate Dei* (see note 93), 448.

95 "Verum, ut dixi, antiquorum magnitudines corpora inventa plerumque ossa, quoniam diuturna sunt, etiam multo posterioribus saeculis produnt." *S. Aurelii Augustini hipponensi episcopi De civitate Dei* (see note 93), 448.

96 "Annorum autem numerositas cujusque hominis qui temporibus illis fuit, nullis nunc talibus documentis venire in experimentum potest." *S. Aurelii Augustini hipponensi episcopi De civitate Dei* (see note 93), 448.

97 Charles P. Carlson, Jr., "The Natural Order and Historical Explanation in St. Augustine's 'City of God'," *Augustiniana* 21.1–2 (1971): 417–47; here 421.

98 "In primordio conditionis humane nongentis annis et amplius homines vixisse legentur." *Lothari Cardinalis (Innocentii III) De miseria humane conditionis*, ed. Michele Maccarone (Lucani: Verona printed, 1955), 15.

99 "Illi namque . . . cum eis pabula oportuniore ad maius tempus existerent preparata, tantorum annorum circulis rite vivebant." *Otonis episcopi Frisingensis Chronica sive Historia de duabus civitatibus*, ed. Adolf Hofmeister. *Monumenta Germaniae Historica, Scriptores rerum Germanicarum*, 45 (Hanover and Leipzig: Impensis Bibliopolii Hahniani, 1912), 40.

entiarum), he attributed this literally unnatural “haste of death” to errors in the proper regimen of health of people afflicted with original sin.¹⁰⁰ The discussion in the treatise *The Great Work* (*Opus majus*), however, is more interesting in the context of the topic at hand. Despite many objections, the author here admits that many people attribute the shortening of the human lifespan to changes in the arrangement of heavenly bodies. Their initial configuration was optimal, but slowly began to wither as the world aged. As a result of this decline, human lifespans have been crippled to the point where they are now anchored.¹⁰¹ Velenský, however, may have been more influenced by the teachings about nature cultivated under the influence of Philipp Melanchthon at the University of Wittenberg.

In the comprehensive work *Introductions to Natural Science* (*Initia doctrinae physicae*), printed in 1549, Melanchthon, without further elaboration on the question whether the world is eternal or has a beginning and is perishable, briefly notes that four thousand years ago people had been long-lived, i.e., they had lived to about ninety years of age. Later, however, according to his interpretation, there was an unspecified weakening of human nature, which caused a revolutionary change in the entire human race.¹⁰²

Velenský describes the decline of human longevity chronologically on the basis of the narratives of individual biblical books. According to his interpretation, human life had lasted many hundreds of years before the Flood, after which it was shortened. The author does not comment on this change in any significant

100 “Cum igitur hec festinatio mortis sit contra naturam hominis etiam post peccatum, manifestum est quod ex errore hominis accidit in regimine sanitatis.” *Frater Rogerus Bacon in libro sex scientiarum*, ed. Andrew George Little and Edward Theodore Withington. Opera hactenus inedita Rogeri Baconi, fasc. 9 (Oxford: E Typographeo Clarendoniano, 1928), 181.

101 “Causam autem hujus prolongationis et abbreviationis aestimaverunt multi esse a parte coeli. Nam aestimaverunt quod coeli dispositio fuerit optima a principio, et mundo senescente omnia tabescunt . . . et quod ab illo statu paulatim recesserunt, et secundum hunc recessum ponunt vitae decurtationem usque ad aliquem terminum fixum, in quo est status. Sed hoc habet multas contradictiones et difficultates, de quibus est modo dicendum.” *The ‘Opus Majus’ of Roger Bacon*, ed. John Henry Bridges, vol. 2 (Oxford: Clarendon Press, 1897), 204. For more on another works by Bacon in which this subject is treated, see Meagan Selby Allen, *Roger Bacon and the Incorruptible Human, 1220–1992: Alchemy, Pharmacology and the Desire to Prolong Life* (Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2002), 28–29.

102 “Coniectura . . . significat et initium aliquod fuisse et senectam esse generis humani, videlicet ante quatuor millia annorum fuerunt homines longaevi, qui annos nongentos et circiter vixerunt, deinde natura secuta est muto imbecillior. Erit igitur insignis mutatio universi generis humani.” *Philippi Melanthonis Initia doctrinae physicae*, ed. Carolus Gottlieb Bretschneider. Corpus Reformatorum 13 (Halle a. d. S.: apud C. A. Schwetschke et filium, 1846), 222.

way, contenting himself with stating that it happened by God's intervention.¹⁰³ On life expectancy in Moses's time, Velenský adds that the people of that time had not only been relatively long-lived – the patriarch himself had lived to be one hundred and twenty years old – but had also been healthier. Before his death, Moses had not suffered from any age-related sight defects, nor had his teeth become crooked. As the author points out, Moses had reached his God-ordained goal in life without harm to his health, which can be believed of other men of his time as well.¹⁰⁴ Thusly presented Moses personifies the contemporary Reformation ideal of the patriarchal age: His blessed lifespan had been predestined by God, but its full fruition had undoubtedly been made possible by a lifestyle attentive to health risks and natural remedies.¹⁰⁵ According to the testimony of the *Book of Sirah*, human life eventually reached as little as one hundred years, and it was still possible to live it in full health. However, the Psalms of King David already report that life expectancy was not more than eighty years, but rather seventy, and moreover, later life stages began to be accompanied by health problems. Velenský concludes that humanity has been doing worse and worse ever since. At a time when the world has reached its final period of extreme old age, few people live to be over sixty in good health.¹⁰⁶

Velenský presents the gradually decreasing human lifespan as evidence of phylogenetic withering, which is a consequence of the aging process of the world. And indeed, the present physical world is decrepit and plagued by suffering, for heavenly bodies no longer perform their movements except in a languid manner. The results are previously unprecedented, almost annual solar and lunar eclipses, and above all unnatural climatic manifestations of the seasons. In the author's words, "When it's supposed to be warm, it's cold, when it's supposed to be cold, it's warm, when it's supposed to be rainy, it's dry, when it's supposed to be dry, it's rainy." A similarly problematic manifestation is the sudden change of weather. Again, in the words of the author, "Today is cold, tomorrow warm, today frost, tomorrow thaw,

103 "Neb před potopau mnoho set let život lidský trval. A po potopě, ač božským zřízením, ukřácení jeho stalo se." Velenský, [Spis] (see note 75), D₄r.

104 "Mojžíš prý ve stu a dvaceti letech byl, když umřel jest a neblikalo oko jeho, ani zubové jeho zaviklaly se. A tak Mojžíš až k cíli od Boha uloženému lidskému životu bez újmy a zdraví přišel, což i o jiných téhož věku věreno býti muože." O. Velenský, [Spis] (see note 75), D₄r.

105 On the contemporary discussion of predestination and the possibilities of medicine, see Erik A. Heinrichs, *Plague, Print, and the Reformation. The German Reform of Healing*. The History of Medicine in Context (London: Routledge, 2017), 90–93.

106 "Dnové prý let našich sedmdesát let, pakliže v mocnějších, osmdesáte let, a co potom více, práce a bolest. A tak čím dále vždy huoř, neb za našich posledních časuo, když již svět k poslední starosti přišel, řídkaž z lidí jest, kdož by šedesát let ve zdraví přečkal." Velenský, [Spis] (see note 75), D₄v.

today clear, tomorrow cloudy.” These unnatural climatic manifestations and their abrupt changes result in the elements being ruined, nasty fogs, stinking rust and other ills affecting agricultural crops. Their consumption subsequently transmits plague to domestic animals and humans.¹⁰⁷

These impressive images of the confusion of the elements, however, can only partly be the result of the author’s reflections on natural sciences or impressions of current climatic changes, as his chosen discursive devices paraphrase the literary language of ancient prophecies about the end of the world. The patristic author, Lactantius (ca. 260–317), in his work, *Divine Institutes* (*Institutiones divinae*), describes the last days of all creation in a similar way. At the end of the fourteenth chapter of the seventh book, he invokes earthly and heavenly prophecies which, in announcing the imminent end and demise of the universe, describe “the extreme old age, as it were, of a tired and tottering world.”¹⁰⁸ Into the sixteenth chapter, Lactantius lists an extensive enumeration of manifestations of the destruction of the world (*de munti vastatione*). Cities will be uprooted not only by sword and fire, but also by earthquakes, floods, frequent diseases, and constant famines. The air will be disturbed, corrupted, and pestilential by climatic disturbances, by unusual rains and droughts, and sudden frosts alternating with heat.¹⁰⁹ Numerous signs will appear in the sky, and celestial bodies will show signs of unusual behaviour. There will be a permanent eclipse of the Sun, so the distinction between day and night will be lost. The moon will turn blood red and it will be impossible to discern

¹⁰⁷ “Neb když by teplo býti mělo, tu zima, kdy zima, tu teplo. Kdy mokro, tu sucho, kdy sucho, tu mokro. Aneb dnes zima, zítra teplo, dnes mráz, zítra jih, dnes vdní, zítra mrákota. Kteréžto míchání časuov a živluo zkormaucení, mlhy mrzký, smrdutý rzi a jiné světa neduhy plodí, kreříž to pastvy a potrawy i všicku píci porušující. Mor tak dobře na hovada jako na lidi uvodí.” Velenský, [Spis] (see note 75), D₄v.

¹⁰⁸ “Sed et saecularium prophetarum congruentes cum coelestibus voces, finem rerum et occasum post breve tempus annuntiant, describentes quasi fatigati et delabentis mundi ultimam senectutem.” *Lucii Caecilii Firmiani Lactantii Divinarum institutionum libri*, ed. J.-P. Migne. *Patrologia Latina* 6 (Paris: excudebat Sirou, 1844), 784. For the English translation, see Lactantius, *The Divine Institutes, Books I-VII*, trans. Mary Francis McDonald, O.P. *The Fathers of the Church. A new Translation*, vol. 49 (Washington, DC: The Catholic University of America Press, 2017), 511. See also Paul Archambault, “The Ages of Man and the Ages of the World. A Study of Two Traditions,” *Revue d’Etudes Augustiniennes et Patristique* 12.3–4 (1966): 193–228; here 202.

¹⁰⁹ “Evertentur funditus civitates . . . non modo ferro atque igni, verum etiam terrae motibus assiduīs, et eluvie aquarum, et morbis frequentibus, et fame crebra. Aer enim vitiabitur, et corruptus ac pestilens fiet, modo importunis imbribus, modo inutili siccitate, nunc frigoribus, nunc aestibus nimis;” *L. C. F. Lactantii Divinarum institutionum libri* (see note 108), 791.

the position of the stars, let alone the nature of the seasons, for summer will be in winter and winter will be in summer.¹¹⁰

In describing the apocalypse, Lactantius depends heavily on the Sibylline Oracles, especially the eighth book of this collection, in which, among other things, these verses can be read: “But when God shall change times . . . winter producing summer . . .”¹¹¹ However, the interpretation of a plague epidemic as a result of general weakness of the aging world had been offered already more than half a century earlier by another of the Church Fathers, the Carthaginian bishop Cyprian (d. 259). His letter, *To Demetrian (Ad Demetrianum)*, has an apologetic tone, in which the author argues that the cause of the natural disasters devastating the world is not Christian indifference to the worship of gods.¹¹² In the third chapter, the addressee is reminded that the aging world no longer possesses the strength it enjoyed in the days of its youth, which is manifested, among other things, by the fact that there is not enough rain in the winter to nourish the seeds and not enough heat in the summer to ripen the crops.¹¹³ The Sun, in its waning phase, sends out less bright and radiant rays, the Moon shrinks in its declining orbit, and its horns are exhausted, with the result, among other things, that trees lose their fertility and wither.¹¹⁴ Then, in chapter five, he points out that the

110 “Prodigia quoque in coelo mirabilia mentes hominum maximo terrore confundent . . . sol in perpetuum fuscabitur, ut vix inter noctem diemque discernatur. Luna . . . sanguine obfusa . . . ut non sit homini promptum, aut siderum cursus, aut rationem temporum agnoscere: fiet enim vel aestas in hyeme, vel hyems in aestate.” L. C. F. Lactantii *Divinarum institutionum libri* (see note 108), 791.

111 “Tempora sed postquam Deus immutarit . . . Ex hieme aestatem faciens . . .” *Oracula Sibyllina*, ed. Charles Alexandre (Paris: apud Firmin Didot fratres, 1869), 229. For the English translation, see *The Sybilline Oracles*, trans. Milton S. Terry (New York: Eaton & Mains Press, 1899), 171. For more on this corpus of prophecies, see Jane L. Lightfoot, *The Sybilline Oracles: With Introduction, Translation, and Commentary of the First and Second Books* (Oxford: Oxford University Press, 2007), 3–23.

112 Dean, *The World Grown Old* (see note 93), 48. For more on climactic changes in the third century and the so-called Plague of Cyprian, see Kyle Harper, *The Fate of Rome: Climate, Disease, and the End of an Empire* (Princeton, NJ, and Oxford: Princeton University Press, 2017), 119–59; on *Ad Demetrianum*, see David Vopřada, “*Senctus mundi: Křesťané tváří v tvář krizi. Cypriánův spis Demetriánovi a Augustinovy promluvy po Alarichově dobytí Říma*,” *Krize a kairos. Teologická perspektiva*, ed. Jan Hojda (Červený Kostelec: Pavel Mervart, 2010), 31–52.

113 “. . . illud primo in loco scire debes, senuisse jam mundum, non illis viribus stare quibus prius steterat . . . Non hyeme nutriendis seminibus tanta imbrium copia est, non frugibus aestate torrendis solis tanta flagrantia est . . .” *Sancti Thascii Caecillii Cypriani Ad Demetrianum*, ed. J.-P. Migne. *Patrologia Latina* 4 (Paris: excudebat Sirou, 1844), 546.

114 “Sic sol in occasu suo radios minus claro et igneo splendore jaculatur; sic, declinante jam cursu, exoletis cornibus luna tenuatur, et arbor, quae fuerat ante viridis et fertilis, arescentibus

earthly tribulations, including plague epidemics that would ravage mankind, had been predicted as part of the last days.¹¹⁵

Velenský's description of rapid climate change can be read as an update of Sybil's words about winter turning unnaturally into summer and of the eschatological tradition that followed. In the author's view, a plague epidemic is part of a wider ecological crisis caused by the aging of the world. This danger of rotten air and contaminated food is just one of many similar diseases that have only recently begun to plague humanity. In this context, the author once again returns to the narrative of an idealized antiquity as a time that hardly knew diseases and therefore did not need to pay attention to medicine. Only their appearance led to the pioneering achievements in the field of this discipline. The author associates the name of Pliny the Elder (ca. 23–79) with a time when there were three hundred diseases in the world, though not all of them fatal, and the name of Arnaldus de Vila Nova (ca. 1240–1311) with a time already plagued by five thousand diseases, of which a thousand were fatal.¹¹⁶ Velenský does not interpret this growing number, to which during his lifetime diseases with the attributions “French,” “Spanish” and “English” were added, as directly proportional to the deepening medical knowledge. On the contrary, he sees it as a consequence of escalating environmental catastrophe, for which he finds an *argumentum ex silentio* in the absence of reports on these diseases in historical sources.¹¹⁷

Conclusion

The common denominator of the Czech-language sources studied is the effort to present nature to the lay reader primarily as a created world, i.e., the work of Almighty God. Both in the late medieval period and at the beginning of the early modern period, authors turned their attention to the concept of the human being mirroring the universe in his/her inner structure. This discursive device fulfilled

ramis sit postmodum sterili senectute deformis.” S. T. C. *Cypriani Ad Demetrianum* (see note 113), 547.

115 “. . . quod humanum genus luis populatione vastatur, et hoc scias esse praedictum, in novissimis temporibus . . .” S. T. C. *Cypriani Ad Demetrianum* (see note 113), 547.

116 “Že za času Plinia . . . tři sta nemocí počteno . . . potom, když teď k předešlému věku přišlo, tu jich od Arnoalda na pět tisíc jest načteno, z nichž najmě tisíc . . . člověka umořiti muože.” Velenský, [Spis] (see note 75), E₁r.

117 “A co ještě za časuo našich těchto jich přibylo. Neb o Franské, Hispánské, Englické a jiných potvorných nemocech voněchno žádné vědomosti nebylo.” Velenský, [Spis] (see note 75), E₁v.

a primarily didactic function in their works because of its impressiveness and illustrative nature. With the exception of Velensky's treatise, those treatises are dominated by a cosmocentric approach. The human being is explained as a mirror of the universe not only on the basis of simple correspondences in the composition of individual elements, but also on the basis of their mutual influences and principles of functioning. The reader can, in the treatise by Tomáš of Štítný, for instance, thus discover an explicit reference to the order of the created world, which is the source of its harmony. That is the same harmony that can be found in the arrangement of the organs of the human body and the principles of its functioning. Although the intentions of various interpretations of the human being as a microcosm differ, they are united by a moralistic appeal that emphasizes the evidence of the extraordinary relationship between God and humans, which is manifested in the form of the wondrous constitution of the human body.

The argumentation of macrocosmic dynamics has also found its application in the interpretation of the aging process. The movements of celestial planets not only mark the milestones of bodily development, they also set, by their influences, the modes of behavior and experiences which belong to each age. In particular, the authors of the second half of the sixteenth century, under the influence of Melanchthonism, explicitly mention the factor of Divine Providence, but in this way they do not, in principle, step out of the framework of the older scholastic discussion on the causes of things. This view is also inherent in medical works dealing with basic physiological features of the human body. In these texts, however, we see above all a clear anchoring in the tradition of the field, manifested in the use of the metaphor of the lamp and the adaptation of the terms 'innate heat' and 'radical moisture.' The length of human life has a predetermined or finite dimension, subject to the action of Divine Providence. However, this dimension is perceived as natural, and natural causes, or rather the action of 'innate heat' and 'radical moisture,' subsequently explain all the manifestations that shape the form of life.

It would be anachronistic, however, to interpret pre-modern physiological treatises only through the prism of our modern view, which tends to separate theological and scientific topics. The opposite was characteristic of the pre-modern paradigm. This fact can be well observed in Velenský's interpretation of a plague epidemic as the result of the aging of the world. To this end, the author uses an anthropocentric perspective and uses the mirror of physiology of the human body to justify processes in the universe. The discursive means chosen seem to be in full agreement with an approach to nature as a structure of causality, but their source is rooted in an eschatological tradition based on revelations, not science. The interpretation of changes in

the macrocosm thus tends to explain climate changes as signs of God. What was predicted is now actually happening, for the macrocosm has aged and its manifestations mirror the many afflictions of the old body, whose ‘innate heat’ is already cooling down. Thus, the prospect of the end of the created world and the demise of earthly human society can also be interpreted as a chain of natural causes and effects that are accessible to rational reasoning.

Filip Hrbek

Perception of Air Quality in the Czech Lands of the Sixteenth and Seventeenth Centuries

Abstract: This study addresses the issue of air quality in early modern Czech lands (Bohemia) through an analysis of contemporary texts intended both for scholars and ordinary citizens. From the times of Hippocrates and Galen until the modern period, medicine was based mainly on dietetics, which included the overall lifestyle. Its principle was harmony of human activities as well as the use of what Galen called the *sex res non naturales* (six non-natural things), where the first field of interest was light and air. Lay scholars, secular authorities, representatives of municipalities, and later also superordinate authorities did not remain impartial and paid close attention to the issue of the relationship of human health and the environment. This study is based on the analysis of anti-plague documents written by doctors and lay scholars, and on official regulations for early modern Bohemia. The contemporary topographies that describe the landscape and air are used as well to identify and clarify the discourse on the importance of good air quality to combat epidemics.

Keywords: Air quality, plague, health, town, environment, topography, pollution, industry

Introduction

The issue of air quality is nowadays considered one of the most important global challenges, and a focus of humanity's effort to counter global warming. However, if we want to build better relationships between humans and the environment today, we cannot ignore the relationship of individuals to the environment in the past, including past problems and proposed solutions. Concern about the environment can be traced back to the late Middle Ages and early

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modern period, though the evidence from Czech lands comes mainly from the sixteenth and seventeenth centuries.

Medieval and early modern people were almost constantly exposed to the threat of different kinds of epidemics, be it smallpox, typhus, pneumonia, or plague – but considering, for instance, AIDS, Ebola, or COVID-19, this problem continues until today despite much improved medicine. Of course, contemporary medical doctors were not able to distinguish between these diseases and only some of these epidemics featured specific symptoms enabling doctors to identify them properly. Only early modern syphilis drew attention to the question of the origin of this disease because it emerged in Europe not until the late fifteenth century and was clearly the result of sexual intercourse. Naturally, subsequent medical professionals intensively discussed the question of the spread of disease and focused especially on air, both corrupted by infected people and by other factors, as a primary cause.¹

This paper is based on the analysis of two main types of historical sources. One of them is the corpus of anti-plague treatises written in the Czech language by doctors and lay scholars without medical education.² These texts were primar-

1 The first well known work which opened this discussion was by the Italian medical doctor Girolamo Fracastoro, who published his work *Syphilis sive morbus gallicus* in 1530. The topic of the origin of diseases from the historical-medical view was further elaborated by many historians, e.g., Vivian Nutton, "The Seeds of Disease: An Explanation of Contagion and Infection from the Greeks to the Renaissance," *Medical History* 27 (1983), 1–34; Mary Lindemann, *Medicine and Society in Early Modern Europe*. 2nd ed. New Approaches to European History, 16 (1999; Cambridge: Cambridge University Press, 2010), 66–70. Editor's note: There are indications that syphilis existed in late medieval Europe prior to Columbus's voyages to the Americas, but the issue is very complicated and continues to be debated. See the helpful overview article online at <https://en.wikipedia.org/wiki/Syphilis> (last accessed on Feb. 12, 2024).

2 Literature for plague epidemics is really vast, therefore I offer here only a selection. For plague epidemics, see, e.g., Carlo M. Cipolla, *Fighting the Plague in Seventeenth-Century Italy*. Curti Lectures, 1978 (Madison, WI: University of Wisconsin Press, 1981); Carlo M. Cipolla, *Faith, Reason, and the Plague in Seventeenth-Century Tuscany*, trans. Muriel Kittel (1977; Ithaca, NY: Cornell University Press, 1979); Samuel Kline Cohn, Jr., *Cultures of Plague: Medical Thinking at the End of the Renaissance* (Oxford: Oxford University Press, 2010); Paul Slack, "Mortality Crises and the Epidemic Disease in England 1485–1610," *Health, Medicine and Mortality in the Sixteenth Century*, ed. Charles Webster. Cambridge Studies in the History of Medicine (Cambridge: Cambridge University Press, 1979), 9–60; for epidemic patterns of plague and particular waves of plague in early modern Central Europe, see Edward A. Eckert, *The Structure of Plagues and Pestilences in Early Modern Europe: Central Europe, 1560–1640* (Basel: Karger, 1996); Claudia Stein, *Negotiating the French Pox in Early Modern Germany*. 2nd ed. The History of Medicine in Context (2008; London and New York: Routledge, 2016); Bohdana Divišová, *Francouzská nemoc v radách lékařů 16. století: Vznik a vývoj konsiliární literatury na příkladech francouzských, italských a německých představitelů medicíny*. Knižnice Dějin a současnosti, 66 (Prague: NLN, 2018); Klaus Bergdolt, *Der*

ily intended for both individuals and lay authorities. They offered explanations of factors leading to the corruption of the air, which in turn contributed to the perceived spread of plague epidemics.³ The second main type of historical sources

Schwarze Tod in Europa: die große Pest und das Ende des Mittelalters (Munich: C. H. Beck, 1994); Lori Jones, *Patterns of Plague: Changing Ideas about Plague in England and France, 1348–1750*. Studies on History of Medicine (Montreal: McGill-Queen's University Press, 2022); for the plague in Czech lands, see Karel Černý, *Mor 1480–1730: Epidemie v lékařských traktátech raného novověku* (Prague: Karolinum Press, 2014), or in brief, *Velké dějiny země Koruny české – Lékařství*, ed. Petr Svobodný and Karel Černý (Prague: Paseka, 2023), 84–88. For the plague in German lands and its relation to printing culture and reformation, see Erik A. Heinrichs, *Plague, Print, and the Reformation: The German Reform of Healing, 1473–1573*. 3rd ed., 1st ed. in paperback. The History of Medicine in Context (2017; London and New York: Routledge, 2019); Annemarie Kinzelbach, “Infection, Contagion, and Public Health in Late Medieval and Early Modern German Imperial Towns,” *Journal of the History of Medicine and Allied Sciences* 61.3 (2006): 369–89; Lindemann, *Medicine and Society in Early Modern Europe* (see note 1), 50–93.

3 To find relevant texts, I used the Catalog of Old Czech and Slovak Prints (*Knihopis českých a slovenských tisků*), which even in its name suggests that it contains a complete list of Czech-language texts that have survived to this day. *Knihopis českých a slovenských tisků od doby nejstarší až do konce 18. století*, I. – Prvotisky (do r. 1500) (Prague: Komise pro knihopisný soupis československých tisků až do konce XVIII. století, 1925), II. Tisky z let 1501–1800, 1–9, ed. Zdeněk Václav Tobolka, and František Horák (Prague: Komise pro knihopisný soupis československých tisků až do konce XVIII. století 1939–1967). Below I will refer to it as “*Knihopis*,” followed by the record number relating to the specific old text. This source is also available online at: <http://www.knihopis.cz/knihopis-eng.html> (last accessed on Jan. 22, 2024). In the field “*Knihopis Number*,” it is enough to enter a record number in the format of “K12345.” The database is operated by the National Library of the Czech Republic, and, for each record, it is stated in which library, and under which signature the text is stored. Jan Černý, *Spis o nemocech morních, kterak se mají lidé chovati před tím i při tom času* (Prague: Pavel Severýn z Kapí Hory, 1530), K01770; Jan Berka z Chocně, *Mistra Jana z Chocně učení pražského knížíky o morních příčinách, znameních, o nemocech i lékařství složené a vůbec k tomuto času vytištěné, také bohatým i chudým ku potřebě vydané* (Litomyšl: Pavel Olivetský z Olivetu, 1531), K03472; Jan Kopp z Raumenthalu, *Knížka o nakažení morním sepsaná skrze Jana Koppa z Raumentálu, doktora ec.* (Prague: Bartoloměj Netolický z Netolic, 1542), K04314; Jan Kopp z Raumenthalu, *Gruntovní a dokonaly Regiment, neb zpráva, jak jeden každý člověk ve všech věcech zdraví své s Boží pomocí uměním vždycky opatrovati a mnoho těžkých nemocí i také nečasnou smrt předcházeti má a může* (Prague: Jan Had, 1536), K04315; *Lékařské knížky z mnohých knih lékařských vybrané (z) Mistra Křišťana i jiných proti neduhům rozličným* (Prague: Jan Berka z Chocně, 1544), K04588; Jan Vočehovský, *Krátký spis o morové nemoci, která nyní v Markrabství Moravském a okolních zemích panuje* (Prostějov: Jan Günther, 1552), K16589; Bartholomaeus Schwalb von Gisitz, *Narízení a správa velmi potřebná jak by se tohoto nebezpečného času morního lidé zdraví i nemocní, též i opatrovníci nemocných před nakažením morovým nyní i potom chovati, opatrovati a hojiti měli* (Prague: Daniel Adam z Veleslavína, 1598), K15399; *Narízení a správa kratičká, avšak užitečná a potřebná, kterak by se času tohoto morního nebezpečného lidé zdraví a nemocní opatrovati a také jak by se ti, kteráž Pán Bůh touž ranou morovou navštívil ráčil, hojiti měli* (Prague: Jonata Bohutský z Hranic, 1613), K06034; Václav Maxmi-

used for this study is the body of official regulations in early modern Czech lands. One group of them was intended primarily for practical use by the urban dwellers, while the second one consisted of regulations issued directly by these town councils for their citizens.⁴ The focus will rest on those parts of these texts that pay attention to factors affecting air quality. The contemporary topographies that describe the landscape and air are used as additional sources as well – more precisely the new editions of works by Bohuslav Balbín and Bartholomeus Martinides of Prague, and an older edition by Pavel Stránský.⁵ These three texts were (in contrast to anti-plague prints and regulations) intended mainly for academic audiences, but they represent really valuable contemporary evaluations of the climate of all Czech lands and of Prague in the sixteenth and seventeenth centuries.

As far as I can tell, the issue of how inhabitants of towns perceived the air quality analyzed through Czech texts from the sixteenth to seventeenth centuries was never the primary subject of a detailed study.⁶ Attention was paid, e.g., to the

lián, *Armamentarium antiloimicum. To jest: Zbrojnice proti moru připravená, v které se rozliční váleční nástrojové k záhubě ukrutného nepřitele lidského pokolení, jenž jest mor, a k vlastnímu proti němu obránění chovají* (Olomouc: Jan Josef Kylián, 1679), K00246; Oldřich Velenský z Mnichova, *Spis, že člověk může, před morem ujíti* (Prague: Jan Severýn, 1538), K16494.

4 For this study, I used selected texts of regulations and official letters from over 100-year-old editions of documents from the National Museum Archives in Prague, see *Příspěvky k dějinám moru v zemích českých z let 1531–1746 z archivu Musea Království českého*, ed. Václav Schulz. Historický archiv České akademie císaře Františka Josefa pro vědy, slovesnost a umění v Praze, 20 (Prague: Česká akademie císaře Františka Josefa pro vědy, slovesnost a umění, 1902). In order to gain broader approach when dealing with everyday life in early modern towns in Czech lands I have also used an over 130-year-old compilation of archival documents, Zikmund Winter, *Kulturní obraz českých měst: Život veřejný v XV. a XVI. věku, Díl druhý*. Novočeská Bibliothéka 29 (Prague: Museum Království českého, 1892).

5 Bohuslav Balbín, *Rozmanitosti z historie Království českého*, ed. Stanislav Komárek (Prague: Academia, 2017), originally published as *Miscellanea Historica Regni Bohemiae* (Prague, 1679–1688); Bartoloměj Martinides Pražský, “Popis největšího a nejkrásnějšího královského města Prahy, hlavního města celých Čech,” *Jan Hubecius a Bartoloměj Martinides: Dva humanistické popisy Prahy*, ed. Vojtěch Pelc, (Praha: Jednota klasických filologů, 2019), originally published as *Descriptio Amplissimae Atque Ornatissimae Regiae Urbis Pragensis, Metropolis Totius Boemiae* (Prague: Sedesanus, 1615); and Pavel Stránský, *O státě českém* (Prague: Sfinx, 1946), originally published as *Reipublicae Bojemae* (Leiden: Ex officina Elseviriana, 1634).

6 I myself have already dealt with this issue supported by a grant of my Faculty of Arts of Jan Evangelista Purkyně University in Ústí nad Labem, the Czech Republic; the project was called “Krajina patří vítězům” (Countryside Belongs to Winners), number UJEP-SGS-2017-63–005-3, and I wrote a small study about it back in 2020. Unfortunately, this study will be only published this year. The text presented here is a follow-up study of the former one.

quality of water⁷ or to the changes of the weather, mainly utilizing non-Czech sources.⁸ The issue of air as a source of plague epidemics is examined in works concerned with the plague epidemics themselves, be it in contemporary academic works⁹ or in vernacular texts intended for the Czech-speaking people.¹⁰

In this paper I will attempt to answer the following questions: Were the landscape and nature of Bohemia during the sixteenth and seventeenth centuries also judged from the point of view of a “good place to live,” which reflected air quality/air pollution, as is the case today, e.g., as important categories for the choice of house lots? Were the people in the sixteenth and seventeenth centuries already sensitive to the perception of air pollution, or is the individual assessment of air quality (“smells”/“does not smell”) only a question of our modern time? Was there in the mentality of the contemporary people anything like a “pollution industry,” which could be compared to modern industrial production sites? And was there an interest by early modern secular authorities and scholars in preventing air pollution in towns to benefit their inhabitants?

Human Health and Environment

If we want to detect a concern with the connection between air quality and human health in the past, it is necessary to stress that medicine from the times of Hippocrates (ca. 460–370 B.C.E.) and Galen (129–216 C.E.) until the modern period was based mainly on the art of personal regimen (dietetics), which included the

7 David Tomíček, “Water, Environment, and Dietetic Rules in Bohemian Sources of the Early Modern Times,” *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature – Explorations of Textual Presentations of Filth and Water*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 19 (Berlin and Boston: Walter de Gruyter, 2017), 441–57.

8 A review of research literature regarding climate history would be vast, therefore I list only the basic one. For broader approach, see, e.g., Emmanuel Le Roy Ladurie, *Times of Feast, Times of Famine: A History of Climate Since the Year 1000*, trans. Barbara Bray (1967; New York: Doubleday, 1971) or Franz Mauelshagen, *Klimageschichte der Neuzeit: 1500–1900* (Darmstadt: WBG, 2010). Regarding the Czech lands, see *Historie počasí a podnebí v českých zemích – History of Weather and Climate in the Czech Lands*, ed. Rudolf Brázdil. From 1995 onwards, this series was published in Zürich and from 1996 onwards at Masaryk University in Brno (Zürich: Geographisches Institut ETH, 1995). Local studies could be found, e.g., in *Litoměřicko: Vlastivědný sborník*, XIV (Litoměřice: Vlastivědné muzeum Litoměřice, 1978).

9 Černý, *Mor 1480–1730* (see note 2).

10 Filip Hrbek, “Czech-Written Prints on Plague: 16th Century,” *Plague Between Prague & Vienna: Medicine and Infection Diseases in Early Modern Central Europe*, ed. Karel Černý and Sonia Horn (Prague: Academia, 2018), 26–72.

overall lifestyle. Its principle was balance and harmony of human activities, as well as the use of six things “not natural,” where the first field of interest was light and air.¹¹ In the sixteenth and seventeenth centuries, the substances polluting or threatening the human body and originating in the environment played a crucial role in the efforts by individuals to preserve their own health, both in medical/physical and spatial terms. The authors who were interested in air quality at that time were primarily doctors and lay scholars. However, secular authorities, representatives of municipalities, and later also territorial authorities did not remain silent and paid attention to this issue as well. By analyzing the above-mentioned sources, one may search for comments on localities, objects, and activities, which were considered to be sources of air pollution predominantly in the urban areas of early modern Czech lands.

It is necessary to realize that this interest by both the doctors and secular authorities was not driven by consideration for nature, but by the effort to preserve people's health or by the pragmatic interest in maintaining the functioning of the economy, which was fundamentally dependent on the sufficiency and quality of natural sources (water, forests, livestock, animals, and air as a medium that enters all foregoing sources). The second reason for preserving something in nature was to conserve something remarkable (*mirabilia*), strange, something that was not possible to see anywhere else, or something that was unprecedented. In this regard, it is also important to emphasize that from a biblical point of view the whole world around us (including nature) was created by God and therefore contains only His good creations that were mostly not dangerous or frightening.¹² But until the beginning of the modern age (and sometimes even beyond that point) nature was also regarded by the common people mainly as a source of extensive fear and fright, often of fantastic forces, not as a source of mere goodness.¹³

11 Other aspects were: food and drink, rest and exercise, sleep and waking, excretions and retentions, and different affections of the mind. See, e.g., Saul Jahrco, “Galen's Six Non-Naturals: A Bibliographic Note and Translation,” *Bulletin of the History of Medicine* 44.4 (1970): 372–77.

12 See, e.g., the lemma “Nature” in Jacques Le Goff and Jean-Claude Schmitt, *Dictionnaire raisonné de l'Occident médiéval* (Paris: Fayard, 1999), 806–19.

13 Jean Delumeau, *La Peur en Occident (XIVe–XVIIIe siècles) – Une cité assiégée* (Paris: Fayard, 1978); Jacques Le Goff, *The Medieval Imagination*, trans. Arthur Goldhammer (1985; Chicago: University of Chicago Press 1988), especially 27–44 and 47–59. Albrecht Classen, “Imagination, Fantasy, Otherness, and Monstrosity in the Middle Ages and the Early Modern World: New Approaches to Cultural-Historical and Anthropological Epistemology. Also an Introduction,” and Sally Abed, “Wonders and Monsters in The Travels of John Mandeville and in Abu Hamid al-Gharnāṭī's Tuhfat al-Albāb,” *Imagination and Fantasy in the Middle Ages and Early Modern Time – Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen. *Fundamentals of Medieval and Early Modern Culture*, 24, (Berlin and Boston: Walter de Gruyter, 2020), 1–230 and

Therefore, until the modern age there was almost no interest in preserving nature in our contemporary way of thinking, such as trying to preserve nature for future generations and also for the sake of the earth's ecosystem itself. We could therefore liken the perception of nature and landscape in the mentality during the premodern world to a theater stage where the scenes of their everyday life took place.¹⁴

Topographies

From the scholarly-geographical point of view, Czech lands, and this already since the Middle Ages, were considered as a world protected by nature itself, since the whole country was encircled by mountains and old-growth forests on all its borders. These borders were intersected only at several points by historic roads (often trails) or by rivers. From our current point of view, these geographical conditions cannot be considered as something extraordinary. But in the everyday reality of early-modern Central Europe, which, moreover, was since 1599 under the influence of the so-called climatic minimum,¹⁵ these mountains and forests symbolized big and hardly conquerable natural obstacles. Further, after having crossed them, the travelers were often led to a feeling that the Czech lands actually lay at a much higher altitude than was commonly thought. As a proof, we can read part of Bohuslav Balbín's *Miscellanea Historica Regni Bohemiae* (1679):

The high altitude of Bohemia is reason of their healthy air and healthy and fertile lands. Since the more elevated something is, the healthier, more fertile, fresher, and generally

487–510 respectively. For the Czech conditions, see, e.g., Martin Nodl, *Středověk v nás. Každodenní život*, 66 (Prague: Argo, 2015), or Filip Hrbek, “Fantastic Places, Objects, and Creatures in Fourteenth-Century Czech-Language Literature: Imagination During the Reign of the Luxembourg Dynasty,” *Imagination and Fantasy in the Middle Ages and Early Modern Time*, 461–82. See also Albrecht Classen's Introduction to the present volume.

14 Compare this to all kinds of different illuminations from Middle Ages, where nature and environment are just mere stages, where both everyday and special activities take place, e.g., *Les Très Riches Heures du Duc Jean de Berry, Calendrier*. Chantilly, Musée Condé, 15th century, or *Suite des Nobles Pastorales, La danse*, Tapisserie, Paris, Musée du Louvre, 1551, and many more.

15 The climatic minimum is period in the history of climate of Europe, when the temperatures fall rapidly. Sometimes it is also called the “small ice age.” Rudolf Brázdil and Oldřich Kotyza, *History of Weather and Climate in the Czech Lands III – Daily Weather Records in the Czech Lands in the Sixteenth Century II* (Brno: Masarykova universita, 1999), 34–35; and Christian Pfister et al., “Documentary Evidence on Climate in Sixteenth-Century Central Europe,” *Climate Change* 43.1 (1999): 55–110; or Brian Fagan, *The Little Ice Age: How Climate Made History* (New York: Basic Books, 2000), especially figures at pages 49 and 151.

healthier it is . . . The very plants and other herbs and shrubs in the mountains, even the stones and gems, ores and crystals, are more durable/lasting than those from the lowlands. According to chronicler Kosma . . . the high altitude of the country was also appreciated by the legendary founder of the nation, “forefather Czech,” when he decided in which land to settle, even though there were many other uninhabited regions. However, only because of these qualities he had chosen Bohemia. Rivers are sweeter and cleaner the higher they are situated. Salmon, sturgeons, and other fish chase for these delicious waters since water from springs is better, because they lie in higher altitude. Also, the more elevated the place is, the more one could encounter the finest and most delicate air quality.¹⁶

Several lines later Balbín then pays attention to the characteristic of air itself:

From this high altitude, Bohemia also has the advantage of being very permeable to winds, which quite often literally sweep it clean, which . . . contributes greatly to a healthy atmosphere. It must also be mentioned that our mountains are not bare but are all covered with trees bearing acorns or edible fruits, which itself proves their fertility . . . Many forests consist of pines and other coniferous trees, which clarify and purify the air with their abundant vapors.¹⁷

Balbín concludes his assessment of the air in Czech lands with a passage where he highlights the natural protection nature has provided to the Czech lands. Moreover, thanks to these natural conditions, the people there can live to a greater age. At the very end, he turns his attention to people’s attitudes toward these gifts of nature, when he notes: “Today, however, we are shortening our lives through our own fault.”¹⁸ Balbín’s opinion about the wholesome effects of Bohemian air on the human body was probably nothing new, since already some forty years earlier Czech expatriate and writer Pavel Stránský from Záp had written in the introduction to his book *Respublica Bojema* (1633): “The Climate [of Bohemia] is temperate, soft, clean, healthy, and so it seldom causes plague epidemics . . .”¹⁹

The topography by Bartolomaeus Martinides of Prague does not deal with the whole of the Czech lands but concentrates on Prague and its surroundings. Nevertheless, there is a passage which confirms that in the early modern period the air quality was indeed understood as one of many factors influencing the quality of life and health not only of the people, but literally of everything that grows in the land. Martinides writes that the location of Prague in the middle of Bohemia explains the “healthy air.” He continues:

¹⁶ Balbín, *Rozmanitosti* (see note 5), 59; both here and throughout, all translations from Czech are my own.

¹⁷ Balbín, *Rozmanitosti* (see note 5), 60.

¹⁸ Balbín, *Rozmanitosti* (see note 5), 62.

¹⁹ Stránský, *O stáťě* (see note 5), 11.

Experience teaches us that stifling and heavy air not only affects the fruit trees and other crops, but also, which is even more important, greatly tires and weakens animals and men. For just as a clean, clear, and altogether excellent air encourages people of all ages . . . and of any temperament,²⁰ so does an unclean, suffocating, and inhospitable air harm a person of any age and any temperament.²¹

Medical Authors

Next, I will move to the analysis of the perception of air quality in the Czech anti-plague treatise written by doctors or lay scholars from the sixteenth to the seventeenth century.²² The earliest of them is the work by the doctor Jan Černý,²³ who writes that plague comes from poor air constantly inhaled. With this statement he confirms that people in the early modern period understood air as a medium which pervades everything²⁴ and that it was necessary to pay attention to its quality. In another part of his text, Černý characterizes locations that would be the most suitable for living. Such places should not be in the proximity of still water because from them smelly vapors corrupting air would arise. With regard to the air quality he furthermore lists as places not suitable for living any locations close to cemeteries, slaughterhouses, and the workshops of butchers, tanners (which he calls “smellers”), furriers, and soap makers. The reason is that they are emitting “smelly air.” He then concludes his part dedicated to air quality by warning that everyone should avoid smelly air coming from ponds, waters for soaking flax, hemp, pigwash, dung, bails, stables, dead and even alive dogs, cats, and cows, and all dead corpses.²⁵

Similarly, the doctor Jan Berka was also convinced that the corrupted air is a possible source of diseases.²⁶ And therefore he warns against living on ground floors and recommends the upstairs, where less humidity and vapors are present. These vapors come from unburied human and animal corpses, muddy ponds, wetlands, and ponds for soaking flax, so it would be recommendable to avoid

²⁰ By “temperament” the author means different natures of people from a medical point of view, where specific bodily fluids determine the classification – blood, bile, black bile, and phlegm – and also one of following qualities – heat, dryness, coldness, moisture.

²¹ Martinides Pražský, *Popis* (see note 5), 181, all my translation from Czech.

²² *Knihopis*, I. – Prvotisky (do r. 1500) and II. Tisky z let 1501–1800, 1–9 (see note 3).

²³ Černý, *Spis* (see note 3).

²⁴ Černý, *Spis* (see note 3), A₅r–A₅v.

²⁵ Černý, *Spis* (see note 3), B₃r–B₃v.

²⁶ Z Chocně, *Mistra Jana* (see note 3).

these places.²⁷ It is also not advisable to live close to churches where a lot of people assembled daily, tanners, butchers, hospitals, soap makers, curriers, furriers, knackers, executioners, and places often affected by floods, and in proximity of abyssees (swamps).²⁸

The volume *Medical Books Selected from all Kinds of Other Medical Books* was printed by Jan Berka who selected this title for an edited text originally written by the well-known medieval Czech doctor Křišťan of Prachaticze whose texts were popular and were reprinted numerous times even after his death in 1439.²⁹ In this work, we are acquainted with the opinion that corrupted air is unsuitable because it causes plague and other diseases. In order to protect the air quality, the town council should therefore clear away rotting carcasses (mainly in cellars) as well as dead bodies of hanged men.³⁰

The question of air quality is also an issue for another doctor, Jan Kopp of Raumenthal.³¹ According to him, it would be possible to enjoy living in good air only if a house and its surroundings would be spared of odors from toilets, slaughterhouses, workshops of butchers, soap makers, and cemeteries. Attention also ought to be paid to still waters, mud, and unclean narrow alleyways.³² The question of air quality was also one of the fundamental points in another extensive work by this author.³³ According to this book, the air quality is affected by things present in it. Where the fresh, wild, and clean streams flow, there is fresh air, whereas where the cloudy, muddy and slow streams flows, or where ponds, lakes, swamps, and wetlands are, there is unclean, humid and unhealthy air. The altitude also plays a role since the mountain air is clean, but in the lowlands the air is humid and muggy. But regarding the altitude, there is one exception – mountain areas where metal ores are mined because in this process the poisonous and smelly vapors evaporate and therefore the air is also poisonous or toxic and unpleasant. The air quality could also be influenced by local flora – healthy trees and suitable herbs help to maintain good air and *vice versa*.³⁴ By contrast, the air could be corrupted by smell coming from iron works, dung, toilets, horse barns, and gutters, which are used to remove the sewage from houses, shafts, carcass pits, workplaces by tanners, cobblers, saddlers, bridle makers, furriers, and

27 Z Chocně, *Mistra Jana* (see note 3), A₄r.

28 Z Chocně, *Mistra Jana* (see note 3), C₄r–C₄v.

29 *Lékařské knížky* (see note 3).

30 *Lékařské knížky* (see note 3), A₃v–A₄v.

31 Z Raumenthalu, *Knížka* (see note 3).

32 Z Raumenthalu, *Knížka* (see note 3), E₃r–E₄v.

33 Z Raumenthalu, *Gruntovní* (see note 3).

34 Z Raumenthalu, *Gruntovní* (see note 3), E₂v.

even bakers, who often raised a lot of pigs. Corruption of air often also occurred in cellars, arched storehouses, and narrow alleyways, not to forget cemeteries.³⁵

Another author, Jan Vočehovský, concluded that the corruption of air, water, and crops occurs thanks to the influence of astral objects and their emanations. And as a proof of the fact that corrupted air enters all materials, he mentions a situation in Moravia in the year 1551 when the wine grapes rotted away because they grew in bad air.³⁶ Similarly, this issue is addressed by Bartholomaeus Schwalb von Gisitz. According to him, people could be infected not only by living in corrupted air, but also from swimming in or drinking corrupted water. Both these arguments led him to recommend that the town councils order the removal of carcasses and dung, and that they drive out livestock from the streets and clear narrow alleyways, also in order to keep all the town pipelines clean.³⁷

Medical authors of a text called *Ruling and Manual Very Brief but Useful and Necessary* were normally content with the observation that people should avoid corrupted air, and in order to achieve that, the town government should assure that pig dung and human excrements were properly cleared from every house. Beyond that, people should avoid all places where there is rotten air, and among them the authors mention “merry pubs,” town baths, and schools.³⁸ The doctor Maximilian Ardensbach of Ardensdorf briefly warned that diseases come from bad air, which is corrupted by rotting and putrefying things, as well as still waters.³⁹

The humanist scholar Oldřich Velenský of Mnichov in his treatise also pays considerable attention to the question of air quality.⁴⁰ From his text we can deduce that the influence of air quality on a human body was perceived by inhabitants of early modern Czech lands also with respect to empirical evidence, since Velenský reminds us that as an example of this influence we could look at the miners extracting gold and silver ore, who often suffocate in the underground. He deduces that the human health could be similarly affected by air corrupted by

35 Z Raumenthalu, *Gruntovní* (see note 3), E₂r.

36 Vočehovský, *Krátký spis* (see note 3), A₄v and A₆r–A₇r.

37 Von Gisitz, *Nářzení* (see note 3), B₁v.

38 *Nářzení* (see note 3), B₃v. For different kinds of restrictions in time of plague epidemics in early modern Czech lands see, e.g., Filip Hrbek, “Health and Community Rescue or Soul Salvation? Incarceration as an Anti-Plague Measure in the Czech Lands in the Sixteenth and Seventeenth Centuries,” *Incarceration and Slavery in the Middle Ages and the Early Modern Age: A Cultural-Historical Investigation of the Dark Side in the Pre-Modern World*, ed. Albrecht Classen. Studies in Medieval Literature (Lanham, Boulder, New York, and London: Lexington Books, 2021), 439–60.

39 Z Ardensdorfu, *Armamentarium* (see note 3), A₈v–A₉r.

40 Z Mnichova, *Spis* (see note 3).

vapors from mud, still waters in ditches, lakes, wetland, or places for soaking the flax and hemp.⁴¹ The air quality is, according to Velenský, also negatively affected by irregularities in changes of seasons, when instead of a warm season there is a cold one. Instead of dry weather, wet weather turns up which would have a negative impact on human health.⁴²

Velenský is only one of the many authors analyzed in this study who apart from warning about low air quality warns also against the excess of good air quality. Velenský suggests that the best air quality is in countries in the north and northeast of Czech lands (explicitly in Moscow, in the land of Tartars, and around Smolensk), where good air quality even leads to overpopulation and lack of food, which is then a reason for an aggressive expansion of these northern and northern-east countries toward their neighboring countries in the west and southwest.⁴³ It is a striking example of early modern thinking about migration caused by environmental changes, albeit by positive climate change, not the negative one.

Early Modern Towns

The air quality was primarily a greater concern for early modern towns. This was intensified by the still returning plague epidemics, which were believed to be more or less connected to the question of air quality (miasma theory). South German town councils already from the fourteenth century onwards were trying to secure for their inhabitants the so called “three ecological qualities,”⁴⁴ about which Konrad of Megenberg wrote in his *Yconomica*, or *Oeconomicae libri tres*, published in the years 1353–1354.⁴⁵ These three qualities were clean air, pure water, and favor-

41 Z Mnichova, *Spis* (see note 3), C₃v.

42 Z Mnichova, *Spis* (see note 3), D₄v.

43 Z Mnichova, *Spis* (see note 3), E₄v–F₁v.

44 For more on the characters of these qualities and their relation to human health, see, e.g., Hrbek, “Health and Community” (see note 38).

45 Konrad von Megenberg, for example, dealt with this topic in detail in his extensive work *Yconomia*, see, e.g., the German edition of his work by Sabine Krüger, Konrad von Megenberg, *Werke*. Vol. I: *Ökonomik*. Monumenta Germaniae Historica 500–1500. Staatsschriften des späteren Mittelalters, III.1 (Stuttgart: Anton Hiersemann, 1973); id., Konrad von Megenberg, *Werke*. Vol. II: *Ökonomik*, Monumenta Germaniae Historica 500–1500. Staatsschriften des späteren Mittelalters, III.2 (Stuttgart: Anton Hiersemann, 1977); id., Konrad von Megenberg, *Werke*. Vol. III: *Ökonomik*, Monumenta Germaniae Historica 500–1500. Staatsschriften des späteren Mittelalters, III.3 (Stuttgart: Anton Hiersemann, 1984). Horst Fuhrmann wrote briefly but accurately about a different understanding of medieval economy in his *Überall ist Mittelalter*, where he also quotes Wolf Helnhard von Halberg, who wrote in 1682, “No activity and no profession is as extensive as the

able winds. Even though it is not possible to prove the existence of any concrete translations of Konrad's work into Czech, it is obvious, as we will see, that even in early modern Czech towns there was a strong interest in the environment and air quality, mostly with regard to repeatedly returning epidemics.⁴⁶

Next I turn my attention to early modern towns in the Czech lands,⁴⁷ which were also affected by plague epidemics in this period quite often.⁴⁸ This resulted in a considerable amount of plague-related historical sources from Czech lands.⁴⁹ But in order to keep this study compact I will focus primarily on regulations which were intended for all towns in Czech lands, and which were divided into individual articles, so that the structure of these regulations was clearly arranged and therefore more easily accessible to its readers, be it town councilors or townsfolk.

In 1585, Emperor Rudolf II's decree and plague order came into effect, emphasizing several duties for the townsmen. Firstly, filth and dung should be cleaned out in front of every house under the threat of a fine.⁵⁰ Secondly, in cases of garbage in the houses or in the streets, such things should be immediately cleared up and taken out of the city. Objects considered as sources of foul smells and bad odors corrupting air included: mud, dung, carrions, sewage from houses, still water in front and even inside houses, blood from slaughterhouses, blood from butcheries, smell from old tallow, smell from rendered tallow, and even living pigs, which are running around and thus are raising the smell and odors coming from all these things. Therefore, all these sources of corruption of air had to be cleared up and taken outside the city walls, since they act as "a great cause of bad health in a human body."⁵¹ Baking and frying of different types of meat and fish should also be forbidden close to residential houses because the smell produced by it also threatened human health. To enforce these rules, the town council could appoint officials with the authority to impose fines on anyone ignoring

economy." See Horst Fuhrmann, *Středověk je kolem nás*, trans. Tomáš Klimek (1996; Prague: H+H, 2006), 50–51.

46 Josef Macek, *Jagellonský věk v českých zemích III* (Prague: Academia, 1998), 127.

47 These sources were accessible to me thanks to the old edition of correspondences and regulations connected to plague epidemics in Czech lands, see Schulz, *Příspěvky* (see note 4).

48 Transregional plague epidemics at the turn of fifteenth and sixteenth century in Czech lands are documented in following years: 1472, 1473, 1483, 1495, 1496, 1497, 1504, 1508, 1510, 1511, 1518, 1519, 1520, and 1521. See, Josef Macek, *Jagellonský věk v českých zemích I* (Prague: Academia, 1992), 319.

49 For example, the Schulz edition (see note 4) mentions 31 towns or villages alone in the north-western part of Bohemia.

50 Schulz, *Příspěvky* (see note 4), 26.

51 Schulz, *Příspěvky* (see note 4), 29.

these rules and “indeed punish them.”⁵² From the supplementary instruction to “plague inspectors” in 1599 we can identify that such a fine could be as high as five Bohemian shock (five threesome) of Meissen groschen.⁵³

A similar historical source resulting from the experiences with plague is a regulation issued by the governor of the kingdom of Bohemia, consisting of twenty-eight articles. A shorter version was published on the 16th July 1613,⁵⁴ the second longer version on the 23rd September 1649.⁵⁵ I work with the longer version since it contains the same articles as the first edition and adds some new ones. According to these rules everyone owning a house in the town was obliged to keep their houses, rooms, kitchens, and covered drainage clean. Above that, nothing smelling should be left in the streets and inside the houses. All waste, mud, and carcasses had to be cleared straightaway in order to prevent these things from corrupting the air, especially in narrow streets. And again, appointed officials should watch that these rules were followed.⁵⁶ The regulations also pay attention to the food processing industry of early modern towns. The fifth article states that sellers of pickled cabbage, salted herrings, dried codfish and other fishes cured with salt, old cheeses and “other similar things emitting odors” should run their business with cleanness, often rinse their products with fresh water, and should dispense with malodorous salt water outside of the town.⁵⁷

However, this document also turns its attention to the area of human activities, which we would nowadays label as an ‘industrial zone emitting air pollution.’ In article six of this document, all crafts are mentioned that are identified as producing smells and odors which could be harmful to other people. Tanners, furriers, belt makers, saddlers, bag makers, and curriers should tan and dry their leathers by the water outside the towns, and ideally at their private properties, not at public ones.⁵⁸

The next article of the regulation pays attention to the low quality of public spaces in towns. Councils are admonished that gullies and shallow depressions in streets and squares should be leveled in order to prevent water and sewage from staying in puddles, since, when they remain in streets and squares for a long time, they slowly evaporate and so corrupt the air. It’s also necessary to cleanse daily all gutters which are used to get rid of the sewage from houses. Also, it

⁵² Schulz, *Příspěvky* (see note 4), 30.

⁵³ Schulz, *Příspěvky* (see note 4), 44.

⁵⁴ Schulz, *Příspěvky* (see note 4), 63–65.

⁵⁵ Schulz, *Příspěvky* (see note 4), 86–92.

⁵⁶ Schulz, *Příspěvky* (see note 4), 87.

⁵⁷ Schulz, *Příspěvky* (see note 4), 88.

⁵⁸ Schulz, *Příspěvky* (see note 4), 88.

should be forbidden to pour down any filthy waters from the windows onto the street, especially water which was used to wash the dead bodies.⁵⁹

The state of public spaces in early modern Czech towns was probably a serious problem,⁶⁰ which affected air quality everywhere. In this regard the biggest problem was the absence of cobbles, since when the weather was dry, a large amount of dust usually arose, and when the weather was wet, an enormous quantity of mud formed. For example, still at the beginning of the sixteenth century, only half of the Wenceslas square in Prague was cobbled, and Livestock square (presently Charles Square) looked more like a forest clearing than a proper urban square, where people used to lie down in high grass. Even in western and southern European countries where the towns had developed further than the newer towns in Bohemia, the cobbling of public spaces started later than we would assume. For example, the process of cobbling public spaces in more developed towns of southern France was not even finished until the beginning of the sixteenth century, and in Germany the old medieval towns started to have cobbled streets and squares as late as the beginning of the fourteenth century, which was similar to the situation in Czech lands.⁶¹

The problem of low quality of cleanliness was also connected with the problem that these spaces usually served also as a dump of all unnecessary materials. Today we can hardly imagine how, for example, smelly must have been the pile of dung and old construction materials at Prague's Malá Strana in the year 1604, which was so big that several beggars and "loafers" were actually living in it. One official document reminds us that the smell coming from it was unbearable and

59 Schulz, *Příspěvky* (see note 4), 88.

60 Historians have already paid some attention to the question of filth in medieval and early modern towns and also to the state of the quality of urban spaces; see, e.g., Alain Corbin, *The Foul and the Fragrant – Odor and the French Social Imagination*, trans. Miriam Kochan (1982; Leamington Spa, Hamburg, and New York: Berg Publishers, 1986); Albrecht Classen, "Urban Space in the Middle Ages and the Early Modern Age – Historical, Mental, Cultural, and Social Economic Investigations and Sewers, Cesspools," and Allison P. Coudert, "Privies – Waste as Reality and Metaphor in Pre modern European Cities," *Urban Space in the Middle Ages and the Early Modern Age*, ed. Albrecht Classen (Berlin and New York: De Gruyter, 2009), 1–145 and 713–33 respectively; *Bodily and Spiritual Hygiene in Medieval and Early Modern* (see note 7), especially Albrecht Classen, "Introduction: Bathing, Health Care, Medicine, and Water in the Middle Ages and Early Modern Age," 1–87, and David Tomíček, "Water, Environment, and Dietetic Rules," 441–57; see also the contributions to *Cities and Their Spaces: Concepts and Their Use in Europe*, ed. Michel Pauly and Martin Scheutz. Städteforschung, 88 (Cologne, Weimar, and Vienna: Böhlau, 2014).

61 Macek, *Jagellonský věk III* (see note 46), 128–29. Some retardation in these efforts in Czech lands was probably caused also because of the religious wars (Hussite Wars).

really unhealthy, and therefore the pile should be cleared away as soon as possible, since it was also corrupting the air.⁶²

It is worth mentioning that pouring filth onto the streets and squares was probably a really widespread phenomenon, which had the potential of affecting the air quality. Hilarius of Litoměřice already in 1466 appealed to the burghers of Plzeň (Pilsen): “Let your fields flourish with manure, but let your streets shine with cleanness!”⁶³ but this bad habit persisted in early modern Czech towns. We can find evidence in my hometown of Litoměřice from the year 1560 when the town government decided to impose a fine of fifteen Meissen groschen for those who “poured the filth or water from windows of their rooms or kitchens down to streets.”⁶⁴ In this town, as late as 1545, pigs roamed all over the town’s streets and squares, since in this year the town council repeated regulation that everyone who bred pigs and allowed them to run freely on the square or street should have to pay a fine of five Meissen groschen.⁶⁵ Such a sad state of public spaces was probably really common, and issues with livestock and processing of its meat remained a problem still in the seventeenth century, for example in the town of Louny in the year 1609 when the butchers were admonished not to throw tripes on the street.⁶⁶

Conclusion

To answer the question whether the landscape and nature of the sixteenth and seventeenth centuries were also judged from the point of view of a “good place to live,” which included air quality/air pollution, as is the case today, it can be confirmed that the texts by lay scholars were certainly dealing with this issue, whereas the official documents and correspondence did not. The authors of topographies were interested in the issue of air quality, because it was simply their task to evaluate the climate of their country for their readers. According to Balbín, Bohemia was a good place to live also because of the high altitude, which positively affected the air quality. Pavel Stránský and Martinides of Prague similarly argued that the quality of the landscape (even that of towns) reflects itself also in the air quality, which is important for preserving the health of inhabitants.

⁶² Winter, *Kulturní obraz II* (see note 4), 184.

⁶³ Winter, *Kulturní obraz II* (see note 4), 130.

⁶⁴ Winter, *Kulturní obraz II* (see note 4), 180.

⁶⁵ Winter, *Kulturní obraz II* (see note 4), 187.

⁶⁶ Winter, *Kulturní obraz II* (see note 4), 185.

It could thus be concluded that all three topographers placed more stress on positive aspects of the Czech environment than focusing on the factors which could influence the air quality negatively.

The medical doctors and scholars were directly trying to identify places that were bad for one's health because of the poor air quality. Their motivation was to protect the inhabitants against possible threat to their well-being. Thanks to their efforts to identify in their treatises places not suitable for a good quality life, we could, on the other hand, deduce which were the suitable ones. Such 'good places' are far away from still waters, such as ponds, wetlands, but also lakes. These places also should not be close to places for soaking flax and hemp, and to craftsmen dealing with animal slaughter and animal processing (both meat and leather). These 'good places' also should not be in proximity of cemeteries, empty cellars with high humidity, and all kinds of terrain depressions, because the humidity from their surroundings concentrates there. Only Jan Berka from Choceň and Oldřich Velenský give some positive recommendations where to find air of proper quality. Jan Berka warns that people should live in the upstairs, because there is a higher degree of humidity on the ground floor. Velenský then suggests that the best air quality is in the north and northeast of the Czech lands, where this air quality even leads to an overpopulation, which is then reason for the aggressive expansion of these northern and northern-east countries toward their neighboring countries to the west.

Probably also under the influence of ideas formulated, for example, by Konrad of Megenburg, the town administrators tried to secure for their inhabitants an existence where they had available air of proper quality. This was in a broader sense even their duty, as enforced by the king's or his governor's office. There is no doubt that in the medieval and early modern periods, the foundation for a good urban economy was the presence of three environmental qualities: clean air, healthy water, and adequate winds, providing airflow. These three environmental qualities had a direct impact on health.⁶⁷ Without those three aspects, it was not possible to have a healthy and strong economy in a city. For medieval and early modern people, economy and environment (understood from the point of view of health) were interconnected factors that could not function properly without each other.⁶⁸ Therefore, the economy could not operate without healthy air because in polluted (plague-infected) air the inhabitants could become sick

⁶⁷ See Macek, *Jagellonský věk III* (see note 46), 127. Konrad von Megenberg, *Yconomia* (see note 45), and Fuhrmann, *Überall ist Mittelalter* (see note 45).

⁶⁸ See, e.g., Flocel Sabaté, *Medieval Urban Identity: Health, Economy and Regulation* (Newcastle upon Tyne: Cambridge Scholars Press, 2015).

and the economy would suffer. Therefore, the town councils did not pay attention to this issue in some special documents concerned only with the air quality, since it was their duty to provide good air quality for everyone in the whole town.

As to the question whether the people in the sixteenth and seventeenth centuries were already sensitive to the perception of sources of air pollution with regard to an assessment of air quality (“smells”/“does not smell”), we must answer with ‘yes.’ These sources of pollution can be divided into three groups. The first of them are those of the natural origin, such as gorges, terrain depressions, wetlands, swamps and lakes. The second group consists of the consequences of activities of craftsmen and results of everyday activities of inhabitants of the town themselves. As to the former, those were particularly crafts that were present in the town centers and were dealing with animal meat and leather processing, sellers of smelly food (herrings, cheeses, etc.), and pursued problematic ways of preparing food – frying and smoking directly in the streets.

And the third group of sources of the air pollution could be labeled as mere non-hygienic behavior of inhabitants not connected to business or craft activities. We can include here the ways in which human and animal excrements were treated, the breeding of farm animals in unsuitable settings of towns, not clearing the carcasses, not clearing the waste from houses and its accumulation in public spaces, not taking dung out of towns and in a broader sense, the bad maintenance of public spaces – for example not keeping functional even the most simple ways of drainage or sewerage system and not enough cobbling of public space, which had led to a situation, where squares and streets in a wet weather turned to smelly mud. And on the other hand, during dry weather public spaces turned into places similar to prairies from which great amounts of dust rose that penetrated every house and corrupted the air.

The question if there was in the mind of the ordinary people anything like a modern “polluting industry,” we can answer that it is really possible to identify concerns about those environmental issues among the Czech people during the pre-modern period. And it must be stressed that such crafts were really seen as activities corrupting the air, not as a mere sources of “smell” irritating inhabitants of towns. Among the worst smell-offenders, we would have to refer to butchers and, slaughterers, to those who worked with leather (tanners, furriers, curriers, saddlers, bag makers), and to those who produced soap from suet, lye, and ashes. To gain a grip on the actual environmental impact, we would have to determine how many butchers there were in every town and how much waste they produced. For example, in Litoměřice at the beginning of the sixteenth century, there were at the main square alone over fifty butchers, who often prepared

meat right in the streets, squares, and also in enclosed yards.⁶⁹ Also, the processing of raw materials (ore, coal) should be listed in this category.

Moreover, to answer the last question whether there was an interest among early modern secular authorities and scholars in preventing or limiting the air pollution in towns we have to answer with a solid 'yes' as well. For evidence, we could turn our attention to many reports about imposing fines for actions leading to air pollution and to instructions and orders to observe better hygiene and to move problematic crafts and activities outside of populated areas. Because the early modern epidemics were seen as a result of the corruption of air, we must keep in mind that interest among early modern secular authorities in limiting the air pollution was not motivated by abstract ideals of protecting the air as an independent entity, but mostly by efforts to protect the health of the inhabitants. We are therefore not talking about protection of air from today's perspective. If that had been the case, historical sources would have contained mentions of efforts among secular authorities to limit also crafts producing smoke and smell (brick producers, potters, glassmakers, blacksmiths, charcoal makers, etc.). But because of fears of fires such smoke emitting crafts were often already moved from the town centers in earlier centuries and therefore they do not become a point of interest in early modern regulations trying to protect the air. This therefore proves that interest in air quality was in fact primarily motivated by efforts to protect the health of the inhabitants of the city centers. That is also a reason why there are no comments on any efforts to protect the air quality in the countryside or in the suburbs of towns.

As early as the sixteenth century (certainly from the last third of the seventeenth century), the driving forces in efforts for cleaner city environment were dominantly important regional centers, or even Prague itself through different orders and regulations.⁷⁰ But even those larger centers were acting in protection of air mostly in response to the orders and instructions by their territorial lords since the mentality of the townsmen or burghers still understood the cleaning of waste, filth or dirt mostly as an activity which was inferior to them and not matching the status of burghers. That is also a reason why the knackers were hired to do the job. But that does not necessarily mean the townspeople were not aware of the fact that all kinds of vapors, smells, and moistures were corrupting the air, resulting in a threat to their own health. They were just operating inside the intellectual limits of their time. Therefore, we cannot expect to identify in

⁶⁹ Josef Petráň, *Dějiny hmotné kultury* 1.2 (Prague: Státní pedagogické nakladatelství, 1985), 686–87.

⁷⁰ This, however, does not apply to the protection of water, which was already codified much earlier, see note 60.

those times any efforts to protect the air in the same way as it is usual in our time, when we perceive the air as a delicate and vulnerable entity in need of protection from human activities. It is also important to point out the fact that under the influence of developments of medicine the early modern lay authorities were gradually inclined to listen to doctors' calls for better air quality. But implementation of these appeals was enforced only slowly.⁷¹ Because of that, the regulations, instructions, and orders were rather reflecting mainly medical theories and scholarly points of view rather than those of ordinary people.

The early modern period is a time when people started to subdue nature more than before – building of ponds, harvesting more and more wood, mining more minerals, regulating or adjusting the whole parts of rivers, and from the seventeenth century onwards the transformation of the entire countryside in order to create a Baroque space for the princes. Connected with it was also the attempt to regulate the behavior of townspeople as part of efforts to discipline the population. This was certainly an approach characteristic of all early modern European states transforming into the centralized absolute monarchies.⁷²

71 Fundamental for an understanding of the way of how medicine and care for people's health was used to build strong centrist states in early modern Europe is Michel Fouacult, *Sécurité, Territoire, Population – Cours au Collège de France, 1977–1978*. Hautes Études (Paris: EHESS – Gallimard – Seuil, 2004).

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Thomas Willard

Johann Arndt's Book of Nature: Medieval Ideas During the German Reformation

Abstract: Sometimes called the grandfather of German Pietism (“der Großvater des deutschen Pietismus”), Johann Arndt (1555–1621) sought to reduce the doctrinal differences among religious reformers in the German-speaking countries by emphasizing the individual Christian’s approach to God as the creator of nature and humankind. To this end, he turned to elements of medieval mysticism. He prepared his own German editions of the anonymous *Theologia Germanica*, first published in 1528, and the *De Imitatione Christi*, ascribed to the Dutch theologian Thomas à Kempis and first printed in 1471/1472, as well as an edition of selected sermons given by the Dominican preacher Johannes Tauler (1400–1460). All three of these texts were major sources of medieval German mysticism for Reformation theologians, and the *Imitation of Christ* was the most frequently printed book of devotions in the German-speaking world. During his lifetime, Arndt was accused of Spiritualism and other departures from Lutheran orthodoxy. However, half-a-century after his death, his books became important texts for the first German Pietists. Most recently, his theological ideas have been recognized as part of a separate esoteric tradition in early modern German thought.

Arndt’s major work, *Vier Bücher vom wahren Christentum* (Four Books of True Christianity, 1610) proceeded from two separately published books on the Old and New Testaments, with their respective emphases on sin and redemption, to a third book on personal conscience. The third book developed Tauler’s notion of the *unio mystica* (mystical union) of the believer and God. The fourth book was on nature, including human nature, and it capped the sequence. For Arndt thought true knowledge of God came through knowledge of more than the Bible and one’s conscience. He thought that it came through knowledge of God’s love and wisdom as expressed in the creation of the natural world and of mankind.

Keywords: Johann Arndt, Jacob Boehme, book of Nature, Genesis, Martin Luther, German Pietism, imagination, macrocosm and microcosm, natural theology, Jacob Spener, Spiritualism, Theodore Zetzner

Introduction

Martin Luther (1483–1546) has sometimes been compared to his younger contemporary, the medical reformer Theophrastus von Hohenheim, better known as Paracelsus (1493–1543). During their lifetimes, Luther was even called the “Paracelsus of the preachers.” In much the same way, the third-generation Lutheran Johann Arndt (1555–1621) might well be called the “Paracelsus of the reformed preachers.” Throughout a pastoral career of approximately thirty-five years, Arndt tried to reform the different theologies of the Reformation. He did so by suggesting how Christian men and women could use devotional practices such as some that were created for medieval monastics to strengthen their spiritual lives. In addition, he applied esoteric elements of natural philosophy, especially as promulgated by Paracelsus and his followers, to his writing on the Bible and the Christian life. How he came to this Paracelsian Lutheranism is part of a voyage I intend to explore here, discussing first his life and works and then his most important writings, especially about the natural world and its relation to the human being.

Until the twenty-first century, Arndt scholarship was written mainly by church historians.¹ There was relatively little interest in Arndt’s familiarity with the mystical ideas of his own time until the present century, which has earned reassessments to be discussed later in the essay.²

¹ Important studies of Arndt from the late twentieth century include George S. Spink, “John Arndt’s Religious Thought: A Study in German Proto-Pietism,” Ph.D. diss., Temple University, 1970; Edmund Weber, *Johann Arndts “Vier Bücher vom wahren Christentum” als Beitrag zur protestantischen Irenik des 17. Jahrhunderts: Eine quellenkritische Untersuchung* (Hildesheim: Gerstenberg, 1978); Christian Braw, *Bücher im Staube: Die Theologie Johann Arndts in ihrem Verhältnis zur Mystik*. Studies in Medieval and Reformation Thought, 39 (Leiden: Brill, 1986); Wolfgang Sommer, *Gottesfurcht und Fürstenherrschaft: Studien zum Obrigkeitsverständnis Johann Arnds und lutherischer Hofprediger zur Zeit der altprotestantischen Orthodoxie* (Göttingen: Vandenhoeck & Ruprecht, 1988); Udo Sträter, *Meditation und Kirchenreform in der lutherischen Kirche des 17. Jahrhunderts* (Tübingen: Mohr, 1995); and Wolfgang Sommer, *Politik, Theologie und Frömmigkeit im Lutherum der frühen Neuzeit: Ausgewählte Aufsätze* (Göttingen: Vandenhoeck & Ruprecht, 1999).

² Essays written by the Marburg Professor of Theology and Church History, Hans Schneider, in the late twentieth century have proved influential in their collected format, for which see Hans Schneider, *Der fremde Arndt: Studien zu Leben, Werk und Wirkung Johann Arndts. Arbeiten zur Geschichte des Pietismus*, 48 (Göttingen: Vandenhoeck & Ruprecht, 2006).

Arndt's Life and Reputation

We know little of this man beyond what he wrote in books, sermons, and letters.³ Arndt was born into a Protestant family in Halberstadt, in the Harz Mountains of northern Germany. His father must have been successful as a businessman, for the family gave its bookish son the sort of higher education that became standard for scions of leading German families in the late-nineteenth and early-twentieth centuries. Between the ages of twenty-one and twenty-six, Arndt spent five years at four different universities, each of them farther from home than those before it. He did so without always registering for classes or ever taking a degree.

We know more about the world into which he was born. Germany in the late sixteenth century had just passed through what one scholar has called “the great turning” (“die große Wende”) during the age of Martin Luther (1483–1546), which saw an uneasy transition of the various German provinces from a primarily rural and agrarian culture to an increasingly urban and commercial one.⁴ Although birth and death remained as constants of human life, the transition meant that German people on average had less direct experience of nature, less contact with the plant and animal life from which their sustenance came, and fewer threats from the extremes of weather that could ruin crops and starve those who lived off the land. This was certainly true of Arndt, who spent his life in various towns and cities and tended to think of nature in the abstract. He was a theologian in a time when the religious thinkers of his Protestant upbringing had yet to formulate a doctrine of natural theology.⁵ Nevertheless, it seemed to him that the natural world was full of signs that taught the faithful about God's metaphorical hand in the creation as well as their relation to the world and its creator.

3 In the next paragraphs, I have drawn heavily on Thomas Illg, “Johann Arndt,” *Protestants and Mysticism in Reformation Europe*, ed. Ronald K. Rittgers and Vincent Evener (Leiden and Boston: Brill, 2019), 309–27. I have also consulted Daniel van Voorhis, *Johann Arndt: A Prophet of Lutheran Pietism* (Irvine, CA: 1517 Publishing, 2018).

4 Will-Erich Peuckert, *Die große Wende: Das apokalyptische Saeculum und Luther*, 2 vols. (Darmstadt: Wissenschaftliche Buchgesellschaft, 1966).

5 Arndt seems to have been familiar with Raymond of Sebonde (Raimond Sebunda) from his *Theologia Naturalis, sive Liber Creaturum* (1484), the Latin translation of a Spanish manuscript. The Latin text is reproduced in Johann Arndt, *Vier Bücher vom wahren Christentum: Die erste Gesamtausgabe* (1610), ed. Johann Anselm Steiger, 4 vols. (Hildesheim: Olms Verlag, 2007–2023), vol. 4, 249–419; Appendix 2.

Natural theology focused on the understanding of God as the creator of nature. Although it had precedent in the ancient and medieval worlds, it came under widespread discussion only in the eighteenth century. See “Natural Theology and Natural Religion,” *Stanford Encyclopedia of Philosophy* (2020), plato.stanford.edu/entries/natural-theology/ (last accessed on Sept. 23, 2023).

Arndt spent the first year of his university training (1575–1576) at the University of Helmstedt in Lower Saxony, which had become a major training school for future Lutheran pastors. For the second year, he went to the University of Strasbourg, in Alsace. While there, he focused on the study of Hebrew and the Old Testament under Johannes Pappus (1549–1610), a Lutheran whose ecumenicism offset the contentiousness that Arndt had probably seen at the University of Wittenberg.⁶ For either before or after Strasbourg, he went briefly to the university where Luther had taught when he wrote his Ninety-Five Theses (1517). It had become a Lutheran university under the leadership of Luther's appointee there, Philipp Melancthon (1497–1560). However, Melancthon's closest followers, known as Philippists (German "Philippisten"), were at odds with the doctrinaire Lutherans in the theology faculty when Arndt visited. The Philippists accepted as settled various revisions in Church dogma revisions that Melancthon had proposed after Luther's death. Meanwhile, doctrinaire Lutherans called the Phillipists "crypto-Calvinists," even though Melancthon's irenic proposals for reform leaned as much toward Rome as they did toward Geneva. The spirit of contentiousness seems to have unsettled Arndt, who thought a religious life was more important than any church authority.

Finally, Arndt went to the University of Basel, in Switzerland. He studied theology there with Simon Sulzer (1508–1585), a Lutheran who advocated unity among the Protestant sects. He also studied Greek and the New Testament with Theodore Zwinger (1533–1588), who held the university chair in Greek. Zwinger had his main appointment in the medical faculty, where he later held the university chair in the Philosophy of Medicine. He was a convinced disciple of Paracelsus, and he accepted Paracelsian ideas about nature and God at a time when other followers valued only the medical ideas. Zwinger seems to have influenced Arndt more than any of his other teachers.⁷ Indeed, Arndt remained in Basel for a second year to study under Zwinger in the medical school.⁸

When he returned to the family home in Halberstadt at the age of twenty-six, Arndt must have brought a small library of books that he had acquired during his absence. He spent the next two years reading and courting the local woman who

⁶ This detail is supported only by the funeral oration delivered after Arndt's death. It seems likely that Arndt only visited Wittenberg in order to audit lectures there.

⁷ See Hans Schneider, "Jacob Arndts Studentzeit," *Der fremde Arndt* (see note 2), 83–129.

⁸ The influence of Zwinger and Paracelsus in Arndt's thought and writing has been admirably traced in Hans-Peter Neumann, *Natura sagax – Die geistige Natur: Zum Zusammenhang von Naturphilosophie und Mystik in der frühen Neuzeit am Beispiel Johann Arndts*. Frühe Neuzeit, 94 (Tübingen: Max Niemeyer Verlag, 2004), 53–73. Neumann establishes Arndt's ties to both the Renaissance Hermetic tradition and the Paracelsus-alchemical tradition, whereas many scholars identify a connection only to one esoteric tradition.

would later become his wife, while recovering from an illness of some sort. He may have weighed his career prospects in preaching and doctoring, though he held no academic degree in either field. Reality dictated that he appeal to the local Lutheran authority, the Bishop of Anhalt-Saxony, who examined him and determined that he was amply prepared for ordination. In 1584, at the age of twenty-eight, he was married and assigned to a pastorate in nearby Badeborn in the duchy of Anhalt.

This first pastorate did not last long, for a new prince of Anhalt decided the duchy would be strictly Calvinist. Arndt was reassigned to a parish in Quedlinburg, only a few miles away, but in Saxony rather than Anhalt. This move did not last long either, for parishioners complained about Arndt on two counts. First, he insisted on keeping exorcism of the devil as a part of all baptismal services – even for infants. This was standard practice in the pre-Reformation Church, East and West, and it is only partially omitted from the Lutheran and Anglican prayer books today, which has parents, godparents, and other sponsors swear to protect the baptized against “the devil, the world, and the flesh.”⁹ However, many early Lutherans were determined to remove elements of the Roman Catholic Church whenever they could. Accordingly, parishioners also complained that Arndt refused to remove religious art from the church building. He made a good case to his Lutheran superiors, who listened to complaints for several years before finding a new pastorate for him. During this time of uncertainty, he returned to Halberstadt, where he wrote his first important book, *Ikonographia* (1596).¹⁰ In the book, which had a strong influence on Lutheran thinking,¹¹ he opposed the Calvinist Theodore Beza (1519–1605), who maintained that religious art has no theological value. In defense of its value, Arndt cited the thirteenth-century Franciscan Bonaventura, who wrote that the whole world is a sign of God’s glory and wisdom. As the book’s subtitle promised, Arndt offered “a thorough Christian account of pictures, their origins, and their right and wrong use in churches and in the Bible.” He devoted the final

9 The phrase is better known in reverse order as “the world, the flesh, and the devil,” thanks perhaps to the influential 1959 film of that title, which starred Harry Belafonte.

10 Johann Arndt, *Ikonographia: Gründtlicher vnd Christlicher Bericht* (1596; Halberstadt: Georg Koten, 1599), fols. 32v–37v; chap. 9. For a modern edition, see Johann Arndt, *Ikonographia* (1597): *Kritisch herausgegeben, kommentiert und mit einem Nachwort versehen von Johann Anselm Steiger* (Hildesheim, Zürich, and New York: Georg Olms, 2014).

11 On the significant influence of this book on German theology, see Wilhelm Schmidt-Biggemann, “Johann Arndt’s Theology of Emblems” in his *Philosophia Perennis: Historical Outlines of Western Spirituality in Ancient, Medieval and Early Modern Thought*. International Archives of the History of Ideas, 189 (Dordrecht: Springer, 2004), 22–25.

chapter to the engraved designs in a recent book by a Paracelsian physician.¹² These designs were set in the natural world and showed God's influence there. The first one, spread across two folio pages, shows everything from the mundane world of commerce and retreat for prayer, at the bottom, to the "doorway to the Theater of Eternal Wisdom" (see Fig. 1).¹³ A triangular message reaches down from God (shown in the Hebrew letters YHWH) to the pilgrims' pathway. It contains a motto for readers that says "Cum Numine Lumen, et in Lumine Numen" ("In the Spirit of Light, and in Light of the Spirit"). The Latin word "numen," from which English gets "numinous," suggests divine power and presence, appropriate to the reader's experience of a deeply spiritual text.¹⁴ Meanwhile, because the word has the primary meaning "nodding with the head,"¹⁵ viewers of the engraved image may assume that its message comes with higher approval.

Just as influential, Arndt produced a modern German edition of the fourteenth-century book of devotions known as *The German Theology*.¹⁶ Luther had prepared a manuscript edition of this text when he was an Augustinian monk; however, he knew it was written only for the use of monks, and he wanted to take the ideas for meditation to pastors and their flocks. In publishing the medieval text in the updated German of his own time, Arndt wanted to honor Luther while suggesting that the Lutheran Church did not need to intervene between individual members and God. For a later reissue of this classic text of Christian mysticism, he also prepared a modernized German edition of the "Imitation of Christ," written in Latin in the late fourteenth or early fifteenth century. For Arndt, the personal effort to attain and exhibit the humility, piety, and virtue best known to Christians in the life of Christ was a necessary prerequisite for real knowledge of nature or divinity.¹⁷

Arndt returned to the ministry in 1600, when he was transferred to the larger city of Braunschweig (also known as Brunswick to English speakers). By this time, he was at work on a four-book project concerning what he called "true Christianity." As the four volumes appeared during the first decade of the seventeenth century, they

12 Arndt's comments on four illustrations from the first printing of Heinrich Khunrath, *Amphitheatrum Sapientiae Aeternae* (1595) are discussed in Wilhelm Kühlmann, "Johann Arndt und der Paracelsismus: Ein Grundriß," Johann Arndt, *Iconographia* (1599) (see note 10), 212–31. For the illustrations themselves and Arndt's commentary, see pages 81–97.

13 This is the first of the four figures on which Arndt commented in *Iconographia* (see note 7). It is taken from Heinrich Khunrath, *Theatrum Sapientiae Aeternae* (1605 edition) by the courtesy of the Science the History Institute, Philadelphia, PA.

14 In a forthcoming study of this text, Peter J. Forshaw translates the motto as "light with divine power and divine power in light."

15 Cassell's *Latin Dictionary*, ed. D. P. Simpson (London: Casell, 1962), s.v. "numen."

16 Johann Arndt, *Die deutsche Theologie* (Halberstadt: Georg Kote, 1597).

17 Illig, "Johann Arndt" (see note 1), 310–11.

brought him both recognition and condemnation.¹⁸ He later added two further books in attempts to answer charges that he replaced Lutheranism with spiritualism,¹⁹ but these books were usually omitted from later editions. He insisted that his four books fell within the teaching of Lutheranism, though they urged the believer to find his or her own path to God. Meanwhile, the Duke of Braunschweig-Lüneberg chose Arndt to be General Superintendent of the duchy, a position he held for the rest of his life.²⁰ In 1611, he moved his family to Celle to be near the duke's castle. Arndt made visits to all the Lutheran churches in the duchy, and he later revised the rules governing church life there. The new position gave him more time for writing. Work from this period included his edition of selected sermons by Tauler and most notably "Paradise Garden," a book of devotions connected to "True Christianity."²¹ Taken together, as a guide to Christian life and devotion, the two books secured Arndt's position of importance among Lutheran theologians.

Arndt's *Opus Magnum*

The four books of *True Christianity*, published during the first years of the seventeenth century, developed in a sequence which Arndt clearly planned in advance. He gave each book a Latin title and a German subtitle.²² The first book, to which

¹⁸ For the modern view that Arndt's mysticism differs from the traditional Lutheran view of justification through faith alone, see Bernard McGinn, *Mysticism in the Reformation, 1500–1650* (New York: The Crossroad, 2017), 169.

¹⁹ On Arndt's mysticism, see Wilhelm E. Koepp, *Johann Arndt: Eine Untersuchung über die Mystik im Lutherum* (Berlin: Protestantischer Schriftenvertrieb, 1912). On his spirituality and its reception, see van Voorhis, *Johann Arndt* (see note 3), 61–73.

²⁰ See Wolfgang Sommer, "Johann Arndt im Amt des Generalsupintendenten in Braunschweig-Lüneberg," *Politik, Theologie und Frömmigkeit im Lutherum der Frühen Neuzeit* (see note 1), 227–38.

²¹ Johann Arndt, *Paradiesgärtlein Voller Christlicher Tugenden* (Magdeburg and Leipzig: Johann Francke, 1612); John Arndt, *The Garden of Paradise: or, Holy Prayers and Exercises . . . Pursuing the Design of the Famous "Treatise of True Christianity"*, trans. Anton Wilhelm Böhm (London: J. Downing, 1716).

²² Johann Arndt (sic), *Vier Bücher vom wahren Christenthum . . . nebst desselben Paradies-Gärtlein* (Berlin: Evangelischen Bücher-Verein, 1851). I have used the 1873 reprint of this edition available from Google Books, https://www.google.com/books/edition/Johann_Arnds_Vier_B%C3%BCher_vom_Wahren_Christenthum/vZAAACAAJ?hl=en&gbpv=1&printsec=frontcover (last accessed on Dec. 2, 2023).

The Latin chapter titles with English translation are used in the latest, though incomplete, English translation: Johann Arndt, *True Christianity*, trans. Peter Erb. Classics of Western Spirituality (New York: Paulist Press, 1979), which gives only book 1 in full. The recent four-volume edition prepared by Johann Anselm Steiger (see note 5) includes extensive notes on Arndt's revisions as he tried to appease critics. The newly released Book 4 has not been available through

Arndt assigned the Latin title, *Liber Scripturae* (the book of Scripture), focused on the Old Testament. It emphasized sin and repentance. The second book, called *Liber Vitae, Christus* (the book of life, Christ), drew upon the New Testament, with the emphasis on such personal qualities of Jesus as humility and submission to God's will. Book three, *Liber Conscientiae* (the book of conscience), urged readers to examine themselves carefully and to model their lives on that of Christ with the aim of finding spiritual union with Him. Finally, book four, *Liber Naturae* (the book of nature), directed them to continue the search for mystical union with God and Christ by close reflections on God's creations: the great world of nature and the little world of humans (see Fig. 2).²³

In a letter to his younger friend Johann Gerhard (1582–1637), whom he had known since his days in Quedlinburg, Arndt described the function of each book:

Prior libellus ad interiorem hominem viam sternit et patefacit; secundus ad internum hominem proprius deducit, ad gustum nempe rerum spiritualium per crucis tolerantiam; tertius hominem toto intro convertit in se ipsum introducit, regnumque Dei intus latere demonstrat; quartus per Macrocosmum et Naturae librum Deum auctorem et conditorem naturae pectoribus humanis intime insinuat. Homo enim totius universi epitome, Microcosmus, scopus et centrum Macrocosmi est, in quem omnia conferunt Deus et natura, id attestante hominis conscientia.

[The first book prepares and makes clear the way to the inner man. Then the second leads the actual man to the taste of spiritual things through the acceptance of the cross. The third book turns the whole man inward, brings him into himself, and points out the kingdom of God within. The fourth, through the macrocosm and the Book of Nature, intimately brings God, the author and founder of nature, into the breasts of men. For man is the epitome of the whole universe, the microcosm, the goal and center of the macrocosm, into which God and nature contribute everything, as man's conscience attests.]²⁴

interlibrary loan; however, a considerate librarian at the University of Kiel has scanned selected pages at my request.

23 Johann Arndt, *Das vierte Buch vom wahren Christentumb: Liber Naturae* (Magdeburg: Johann Franken, 1610). The same bookseller reissued each of the first three books in the same year; several of the earlier books included revisions, especially the controversial third volume. On the medieval commonplace of the "Book of the World," see Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, trans. Willard R. Trask, Bollingen Series, 36 (1948; New York: Pantheon Books, 1953), 319–26.

24 Quoted in Carlos Gilly, "Hermes oder Luther: Der philosophische Hintergrund von Johann Arndts Frühschrift 'Die antiqua philosophia und veterum Magorum Sapientia recuperanda,' *Frömmigkeit oder Theologie: Johann Arndt und die 'Vier Bücher vom wahren Christentum'*," ed. Hans Otte and Hans Schneider. *Studien der Kirchengeschichte Niedersachsens*, 40 (Göttingen: V&R Unipress, 2007), 163–99; here 164–65. My translation. A native of Quedlinburg, Gerhard got to know Arndt during the older man's ministry there in the early 1590s. This letter was dated January 19, 1608.

In the preface to Book 1, Arndt admitted his debt to the medieval sources he edited and updated for contemporary readers: Tauler's sermons and the anonymous *Imitatio Christi*.²⁵ Before writing about conscience in Book 3, he wrote that he would quote Tauler's words there as often as possible.²⁶ Tauler's conception of the mystical union with God, the *unio mystica*, proved especially important to him.²⁷

The German subtitle of Book 4, on the book of nature, offers to tell readers (see Fig. 2):

Wie das große Weltbuch der Natur nach Christlicher Auslegung von Gott zeuget und für Gott führet; wie auch alle Menschen Gott zu lieben durch die Creaturen gereizet und durch ihr eigen Herz überzeuget werden[.]

[How the great World Book of Nature, according to Christian interpretation, testifies of God and leads to God; just as all men were provoked to love God by the Creatures and persuaded by their own hearts.]²⁸

The preface to Book 4 (The Book of Nature) began by explaining why it necessarily had two parts:

Der große Prophet Moses hält uns im Buch der Schöpfung vor zweyerley gewaltige Zeugen Gottes: erstlich die große Welt, und dann die kleine Welt, das ist, den Menschen. Von diesen beyden nimmt die heilige Schrift herrliche Zeugnisse an vielen Orten, beyde aus der großen Welt und aus der Menschen Herzen, durch welche uns der Schöpfer und Erhalter aller Dinge offenbaret, und in unser Herz gebildet wird.²⁹

[The eminent prophet Moses exhibits to us two powerful witnesses of God, in the book of Creation. The first is the universe; the second is the inferior world, that is, the human world. Both of them, the universe and the heart of man, furnish glorious testimony in the Scriptures, by which the Creator and Preserver of all things is revealed, and also formed in our hearts.]³⁰

On the relationship and correspondence of Arndt and Gerhard, see Inge Mager, "Johann Arndts mystisch vertiefte Seelsorge, insbesondere Johann Gerhard gegenüber," *Mystik – Metapher – Bild: Beiträge des VII. Makarios-Symposiums Göttingen*, ed. Martin Tamcke (Göttingen: Universitäts Verlag, 2008), 83–99.

²⁵ Johann Arndt, "An den Christlichen Leser," *Vom wahren Christentumb* [sic] . . . *Das erst Buch* (Frankfurt a. M.: Nicolas Hoffmann, 1605), fol. A6r; Johann Arndt, *True Christianity: A Treatise*, trans. A. W. Boehm, 1712, New American Edition (Philadelphia: Smith, English, 1868), xlii; bk. 1, preface, par. 8. This unique English translation of all four books is available from Project Gutenberg, <https://www.gutenberg.org/ebooks/34736> (last accessed on Sept. 22, 2023).

²⁶ Arndt, *True Christianity* (see note 25), 381; bk. 3, chap. 1, par. 3.

²⁷ On the doctrine of the *unio mystica*, see Illg, "Johann Arndt" (see note 3), 315–16.

²⁸ Arndt, *Vier Bücher* (see note 22), 434.

²⁹ Arndt, *Vier Bücher* (see note 22), 434; bk. 4, Vorrede.

³⁰ Arndt, *True Christianity* (see note 25), 423; bk. 4,

For the words translated here as “the universe” and “the inferior world,” the German original has “die große Welt” and “die kleine Welt” (the great world and the little world), which correspond to the macrocosm and microcosm (*macrocosmos* and *microcosmos* in the post-classical Latin that Arndt used in the letter to Johann Gerhard). The German counterparts “Makrokosmos” and “Mikrokosmos” appeared in works of the radical theologian Valentin Weigel (1533–1588), who drew on the writings of Paracelsus.³¹ Early critics of Arndt such as Prince Augustus of Anhalt (son of the prince who turned the duchy Calvinist during Arndt’s first pastorate) questioned his conformity on the grounds that his ideas resembled those of Weigel.³² Arndt anticipated such criticism and insisted that the fourth book belonged in *True Christianity* because its ideas were all in the Bible. The first text he cited after making this statement was Paul’s epistle to the Church at Colossae in Asia Minor, which he placed at the head of Book 4 to explain its theme: “All creatures are messengers of God, intended to lead us to God.”

By him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers: all things were created by him, and for him; and he is before all things, and by him all things consist. (Colossians 1:16–17)

Finally, for anyone who thought he went too far in suggesting that one can learn about God from the creation, Arndt wrote in the conclusion to Book 4 that his purpose was this:

neben dem Wort GOTTes und dem Buch der heiligen Schrift, auch können überzeugt werden in unsern Herzen und Gewissen aus dem Buch der Natur und aus dem Licht der Natur, daß wir GOTT zu lieben schuldig seyn, wegen seiner großen Liebe, die er und durch alle Creaturen erzeiget und beweiset. Und solch Argument aus der Natur überzeuge alle Menschen, er sey Heide oder Christ, gläubig oder ungläubig, und kanne auch kein Mensch widerlegen.³³

Preface, par. 1; quotations from this excellent translation have been modified as needed to keep the language gender neutral, as it is in the original German and was in eighteenth-century English.

³¹ In Weigel’s posthumously published texts, we find the assertion that macrocosm and microcosm belong to a greater unity, in which each is contained in the other and both in the mind of God. See Andrew Weeks, *Valentin Weigel (1533–1588): German Religious Dissenter, Speculative Theorist, and Advocate of Tolerance* (Albany, NY: State University of New York Press, 2000). For Weigel’s influence on Arndt, see van Voorhis, *Johann Arndt* (see note 3), 85–87; also see Neumann, *Natura sagax* (see note 8), 200–06.

³² Gilly, “Hermes oder Luther” (see note 14), 165.

³³ Arndt, *View Bücher*, (see note 22), 532; Beschluß, par. 3. The 2023 edition of Book 4 contains a long note on the Book of Nature as understood during the German Reformation (246–47). It observes the persistence of the medieval view that the books of Nature and Scripture interpret

[to show that, besides the Word of God, the Holy Scriptures, even our own heart and conscience may teach us, from the book of nature, and the light of nature, that we are bound to love God on account of his great love bestowed upon us and manifested through the means of all his creatures. Such an argument, derived from nature, ought to convince every man, whether he be a heathen or a Christian, a believer or an unbeliever; and no one can refute it.]³⁴

Arndt wrote with considerable confidence at a time when Lutheran theology did not have a clear sense of natural theology and was still in the process of defining one.³⁵

Part 1 of Book 4 focused on the Creation story in the first chapter of Genesis. It had six chapters, one for each of the six days of creation as recounted in Genesis 1.³⁶ On day one, God created light, the symbol of God, Christ, and Wisdom; on day two, the heavens, and on day three the division of waters from the earth. On the next three days, God continued the creation with the heavenly bodies on day four, the seas and the waters above and below the firmament of heaven on day five, and the animals and man on day six. Man was given not only authority over the animals but also the faculty to learn about them and their Creator. Toward the end of chapter 6, Arndt urged the reader:

Darum bedenke nun die Schönheit der menschlichen Seele, die da träget das Bild und Gleichnis Gottes. Bedenke, welch eine Schönheit sey der göttlichen Majestät: so wirst du erkennen die Schönheit und Würdigkeit der menschlichen Seele und Natur. Denn wer wollte dieselbe Creatur nicht für die schönste halten, welche nach uns aus sondern Rathschlag Gottes gemacht ist, welche auch nach dem Bilde des höchsten und allerschönsten Künstlers -gebildet, und ihrem Schöpfer gleich ist? . . . und wenn ein solch Bild Verstand hätte, es thäte seinem Künstler nichts zuwider, damit es nur seine Schönheit behielte, zu Lob seines Künstlers und Gedenkest du denn nicht, o Mensch, wer dich zu einem solchen schönen Bilde Gottes gemacht? Warum beraubest du denn deinen Künstler, der dich so schön gemacht hat, seines Lobes, und befleckest dich mit Unreinigkeit?³⁷

each other – persistence found “bei Luther und im zeitgenössischen Luthertum, jedoch auch im Paracelsismus und Hermetismus” (in Luther and contemporary Lutheranism, but also in Paracelsianism and Hermeticism).

³⁴ Arndt, *True Christianity* (see note 25), 528; Conclusion, par. 2; cf. Romans 1:20.

³⁵ See John Warwick Montgomery, *Cross and Crucible: Johann Valentin Andreae (15–1654), Phoenix of the Theologians*, 2 vols. (The Hague: Martinus Nijhoff, 1963), vol. 1, 1–22. Also see van Voorhis, *Johann Arndt* (see note 3), 17–20. Montgomery was a Lutheran apologist attempting to show that Andreae could not have written the explicitly Rosicrucian documents attributed to him. I think he underestimated Arndt's influence on the younger Lutheran.

³⁶ Erb offers summaries of each chapter in part 4 of *True Christianity* (see note 11), 233–35. He gives much shorter summaries of the 40 chapters of Part 2 (236–40).

³⁷ Arndt, *Vier Bücher* (see note 22), 491; bk. 4, pt. 1, chap. 6, par. 25.

[Consider, therefore, the beauty and dignity of thy soul, which is created in the image and likeness of God, so that the glories of the divine majesty are, in a certain proportion, transferred to thee. How much reason have we then to avoid all impurity and uncleanness, that we defile not the beauty of the divine image. For if we are thereby exalted to the highest glory and honor that our nature is capable of, how unworthy and ungrateful would it be, to pollute it by any uncleanness, and forfeit that glory which God has bestowed on us.]³⁸

Unlike many modern commentators, Arndt made no effort to explain the “days” as stages of creation or anything other than the days that go by between one Sabbath and the next. Nor did he note that there are two creation stories in the first two chapters of Genesis, which scholars now call the Elohist and Jahwist versions after the different names used for God in the two accounts. He felt free, indeed obliged, to include reference to the life that God breathed into Adam when “man became a living soul” in the Jahwist version (Genesis 2:7).

Having brought the account of the cosmos to a conclusion with the creation of a living soul, Arndt was prepared to offer his own statement about the dignity of man, comparable to Pico de la Mirandola’s *De hominis dignitate oratio* (1496) or Hamlet’s “What a piece of work is a man” (1623).³⁹ In the first paragraph of Part 2, which described God as an infinite and eternal being, Arndt concluded his proof by asserting that the soul of man was able to comprehend the infinite and eternal. Moreover, it stood to reason that, if God gave so much to people (German, ‘Menschen’, by which Arndt included man’s partner, woman), anyone with faith in God owed God a debt of loyalty for these gifts (chap. 6). Indeed, wrote Arndt:

Allein der Mensch ist also von GOtt geschaffen, daß er der sich dessen freue, was er hat. Das können andere Creaturen nicht thun: denn sie verstehen ihr eigen Gut nicht. Gold und Silber freuen sich ihre habenden Guts, denn sie haben deß keinen Verstand. Weil nun der Mensch versteht; so freuet er sich, das GOtt ihm zu Gute so schöne Creaturen geschaffen hat.⁴⁰

[Man alone has the privilege of really enjoying what he possesses. Other creatures, being void of understanding, have no relish of those blessings from which man receives very great comfort; gold, silver, and precious stones, have no intelligence. But humans, being endowed with an understanding mind, reflect with gratitude and pleasure upon the goodness of God, who has provided so many beautiful creatures for their use and benefit.]⁴¹

38 Arndt, *True Christianity* (see note 25), 456; bk. 4, pt. 1, chap. 6, par. 21. The translator has taken some liberties but conveys the gist of the original paragraph.

39 William Shakespeare, *The Tragedy of Hamlet, Prince of Denmark*, 2.2.292–309.

40 Arndt, *Vier Bücher* (see note 22), 498; bk. 4, pt. 2, chap. 7, par. 2.

41 Arndt, *True Christianity* (see note 25), 463; bk. 4, pt. 2, chap. 7, par. 2.

Arndt maintained that God showed His own wisdom in the creation of man, endowing humankind with the higher faculties of reason, will, and memory (pt. 2, chap. 10). People should therefore love God, for as the title of chapter 15 pointed out, “all the creatures continually remind us of the love we owe to God.”⁴² To soften the burden of this debt, Arndt noted in another chapter title “that our duty to God tends to promote our happiness” (chap. 18; 471).⁴³ From here Arndt reintroduced Tauler's *unio mystica*, noting that service to God promoted the union of the visible and invisible worlds (chap. 21).

It seems worth noting that Arndt rarely wrote more than one sentence without inserting a pertinent biblical quotation. When quoting he used the Martin Luther translations (the *Lutherbibel*), much as he used his own re-phrasings of Tauler in the German he would speak from the pulpit and eventually publish. As he proceeded to speak about the transformative power of love, he explained how it brought people closer to those they love and to the things they love in the physical world. It thus made them better able to love themselves (chaps. 28–33). Here he built on what he urged in Book 3, the Book of Conscience. All of this love led to “divine joy” as something “within us.”⁴⁴ He came to something like Milton's “Paradise within thee happier far,”⁴⁵ without urging a retreat from the world of his parishioners and their daily activity. To this degree, he did what Luther left unfinished. He took the contemplative practices of monastic life (the *vita contemplativa*) to the everyday world of active life (the *vita activa*).

Arndt's Changing Reputation

Of the four main books in *True Christianity*, the first two were the least exceptionable, while the third raised questions because it gave readers permission to look for salvation outside the public church. Here Arndt instructed them “how to seek and find the kingdom of heaven within” (Luke 17:21). As Book 3 book drew heavily on the *Imitation of Christ* and on sermons of Tauler, Book 4 built on Tauler's

⁴² Arndt, *Vier Bücher* (see note 22), 545; Arndt, *True Christianity* (see note 25), 439; bk. 4, pt. 2, chap. 15, title.

⁴³ Arndt, *True Christianity* (see note 25), 471; bk. 4, pt. 2, chap. 18, title.

⁴⁴ Arndt, *True Christianity* (see note 25), 485; bk. 4, pt. 2, chap. 36; par. 4.

⁴⁵ John Milton, *Paradise Lost*, 12.587. The line is delivered to the fallen Adam by the Archangel Michael as an offer of hope before he and Eve must leave Eden.

teaching that, in the end, all of creation would return to God, including all souls.⁴⁶ The fourth book proved the most controversial because Arndt also returned to ideas of Paracelsus and spiritualist writers whom Paracelsus influenced, including Valentin Weigel. Arndt built on the medieval commonplace of the Book of Nature, while he expanded on his early text of iconography. He also developed Hermetic ideas he learned from Zwinger in Basel, notably the relationship of the “great world” or macrocosm to the “little world” or microcosm, a relationship in which the little world of Man contained the image of everything in the great world of nature.⁴⁷

The fourth book was not an appendix to the first three, as some readers maintained, but a clear and necessary development of them. It developed a line of Germanic thought that was common in the years before the Thirty Years’ War: that “unmediated divine enlightenment” (*gottunmittelbare Erleuchtung*) was necessary for true theological understanding.⁴⁸ In Book 3, Arndt suggested that a believer could find heaven on his or her own, and thus outside the Church and its rituals. One could do this through the powers of the human mind, and specifically the imagination.⁴⁹ One could imagine oneself in all times and places, a statement that had its precedent in the Hermetic Books of Egyptian origin, though only preserved in the Greek of late Classical antiquity, later translated into late-medieval Latin by Marsilio Ficino⁵⁰ and Lodovico Lazarelli.⁵¹

The Hermetic edge of Arndt’s writing showed itself most clearly in his treatment of the imagination in Book 4. The word ‘imagination’ had a double sense. In earlier books, it appeared in the biblical sense of false ideation, often vain and sometimes devilish (e.g., Genesis 6:5 and Romans 1:21). In Book 4, it took on more

46 Johann Arndt, *Postilla Johannis Tauleri* (Hamburg: Michael Hering, 1621). The volume included reissues of Arndt’s earlier editions of the *Theologia Germanica* and *Immitatio Christi*. Several of the sermons here are now attributed to Tauler’s teacher Meister Eckhart.

47 See *The Way of Hermes: A New Translation of The Corpus Hermeticum and The Definitions of Hermes Trismegistus to Asclepius*, trans. Clement Salman, Dorine van Oven, William D. Wharton, and Jean-Pierre Mahé (Rochester, VT: Inner Traditions, 2000).

48 See Kocku von Stuckrad, Review of Hermann Geyer, *Verborgene Weisheit, Aries 7* (2007): 239–41; here 241.

49 Weigel had brought the Paracelsian understanding of imagination into theological discussion as a complement to the senses. See Douglas H. Schantz, “Valentin Weigel,” *Protestants and Mysticism in Reformation Europe*, ed. Ronald K. Rittgers and Vincent Everer. St Andrews Studies in Reformation History (Leiden and Boston: Brill, 2019), 243–64, here 247.

50 See Neumann, *Natura sagax* (see note 8), 16–21.

51 See Lodovico Lazarelli, *The Hermetic Writings and Related Documents*, ed. Wouter Hanegraaff and Ruud M. Bouthoorn. Medieval & Renaissance Texts & Studies, 281 (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 2005).

of its classical Latin sense of a mental power. At the beginning of part 2, on the human being as a microcosm, Arndt writes:

Gott ist ein Ursprung des Wesens und Lebens aller Creaturen, und hat denselben allen ihr Wesen und Leben gegeben und erschaffen. Derohalben so ist er vor dem Anfang aller Creaturen gewesen . . . Insonderheit aber wird aus des Menschen Gemüth und Gedanken geschlossen, daß GOTT unendlich ist. Denn es begreift Gemüth in Augenblick Himmel und Erde. Die Sonne hat zwar so eine geschwinden Lauf, das sie dem großen Himmel in vier und zwanzig Stunden umläuft. Des Menschen Gemüth aber thute im Augenblick, und begreift alle Creaturen in sich. Daraus folget nun, daß GOTT vielmehr alle Dinge begreift und beschließet, und demnach unendlich ist.⁵²

[God is the origin of the life and being of all creatures: whence it follows, that he was before all creatures, both an eternal Being, and eternal Life itself . . . But the infinity of God yet more plainly appears from the mind and thoughts of humans. For as the human mind can in a moment run through the whole circle of heaven, and comprehend in imagination all the creatures of the universe, it follows that God who made him, comprehends all these things in a more perfect manner, and by consequence must be infinite.]⁵³

The English translation of 1712 does much to emphasize the significance of Arndt's thought, while giving it additional speed and grace. It shows the great understanding of a leading London pastor, who not only translated texts of Lutheran Pietism but shipped large batches of pietist books to Germans who settled in the colony of Pennsylvania.⁵⁴ For example, it extends 'Gemüth' ('mind') to include 'imagination' and substitutes the Latinate 'infinite' for the more Germanic 'unending.'

This statement recalls a passage in the Greek *Corpus Hermeticum* in which Mind speaks to Hermes, here rendered in a recent translation:

Reflect on God this way as having all within himself as ideas: the cosmos, Himself, the whole. If you do not make yourself equal to God, you cannot understand him. Like is understood by like. Grow to immeasurable size. Be free from every body [sic], transcend all time. Become eternity, and thus you will understand God. Suppose nothing to be impossible for yourself. Consider yourself immortal and able to understand everything: all arts, sciences, and the nature of every living creature . . .⁵⁵

This kind of reflection is, of course, a quite advanced exercise. It came as a revelation to Marsilio Ficino, who translated the available Greek texts into Latin. The

52 Arndt, *Vier Bücher* (see note 22), 493; bk. 4, pt. 1, chap. 1, pars. 1–2.

53 Arndt, *True Christianity* (see note 25), 458; bk. 4, pt. 2, chap. 1, par. 1.

54 See Daniel L. Brunner, "Boehm, Anthony William [formerly Anton Wilhelm Böhme (1673–1722)]," *Oxford Dictionary of National Biography Online*, www.oxforddnb.com (last accessed on Sept. 17, 2023).

55 *Corpus Hermeticum*, bk. 11, par. 20, in *The Way of Hermes*, 57.

word ‘imagination’ (Greek *φαντασία*) appeared in an earlier Hermetic text,⁵⁶ and it was implied as an aspect of mind (*νοῦς*) in an earlier paragraph of the text quoted above.⁵⁷

Ficino’s readers recognized the power of imagination (Latin *vis imaginativa*). The medical reformer Paracelsus certainly did, and he considered imagination a higher power than reason, connecting the individual mind with the mind of God.⁵⁸ This element of his medical thinking appealed to both Zwinger and Arndt. Both relied on the Hermetic concept of macrocosm and microcosm, found throughout the writings of Paracelsus. However, Arndt was careful to attribute the concepts to Scripture, as Carlos Gilly noted.⁵⁹

Following the success of the Four Books, Arndt wrote a popular book of devotions called *Paradiesgärtlein* (“The Little Paradise Garden”),⁶⁰ a thematic prayer book linked to readings in the *Vier Bücher*. Often published together in huge volumes, they secured his position of importance among Lutheran theologians. More than fifty years after his death, these two works inspired the minister Philip Spener (1635–1705) to produce a book of desiderata for reforms in the Lutheran Church.⁶¹ Spener’s book led to the development of the Pietist movement in Lutheranism. Spener has been known subsequently as the Father of German Pietism, and Arndt as the grandfather. Arndt’s German works have been widely popular and have influenced many independent-minded Christians.

A generation ago, the great Lutheran scholar Heiko Oberman (1930–2001) wrote the preface to what became the standard English translation of excerpts from *True Christianity*. He credited the book’s popularity to Arndt’s “harvest of western spirituality” in a manner consistent with “the basic insights of the Reformation.”⁶² However, there is no end to scholarship. In 2001, a major study covering more than 1,300 pages in two volumes discussed Arndt’s *Vier Bücher* in a quite new

56 Corpus Hermeticum, bk. 5, par. 1, in *The Way of Hermes*, 34. For the Greek text here see *Hermetica; The Ancient Greek and Latin Writings which Contain Religious or Philosophic Teachings Ascribed to Hermes Trismegistus*, ed. and trans. Walter Scott, 4 vols. (Oxford: Clarendon Press, 1924–1926), vol 1, 156–58; bk. 5, par. 1.

57 Corpus Hermeticum, bk. 11, par. 18, in *The Way of Hermes*, 57.

58 See Antoine Faivre, “Exercises in Imagination,” in his *Accès de l’ésotérisme occidental*, 2 vols. (Paris: Gallimard, 1996, vol. 2, 171–240, here 173–81.

59 Gilly, “Hermes oder Luther” (see note 14), 191.

60 John Arndt, *The Garden of Paradise: or, Holy Prayers and Exercises . . . Pursuing the Design of the famous “Treatise of True Christianity”*, trans. Anton Wilhelm Böhm (London: J. Downing, 1716). For the German text see note 11.

61 Philipp Jakob Spener, *Pia Desideria* (1675; Philadelphia, PA: Fortress Press, 1964).

62 Heiko Obermann, “Preface,” in Johann Arndt, *True Christianity*, trans. Peter Erb (see note 11), xi–xxvii. His reference to “the harvest of medieval theology” alludes to his study of medieval in-

way. The author called it “a program for a spiritualistic-hermetic theology.”⁶³ The book had quite an effect. In a long review, the Lutheran scholar Monika Neugebauer-Wölk said it began a paradigm shift in the scholarly understanding of German Pietism.⁶⁴

Soon there was a colloquium on the book at the great August Herzog Library in Wolfenbüttel.⁶⁵ Participants included both the new book's author and his dissertation director at Marburg, both of whom maintained Arndt's thought was largely founded in non-Lutheran material, ancient and medieval. To the colloquium's question whether Arndt's *Vier Bücher* belonged to pietism or theology (*Frömmigkeit oder Theologie*), they and others presented evidence to suggest that Arndt's thought had an alchemical foundation and that many Pietists took interest in alchemy and in writers like Arndt's younger contemporary Jacob Boehme (1575–1624), who drew extensively from Paracelsus. All this took the discussion back to Arndt's years in Basel, when he studied both Lutheran theology and Paracelsian medicine, which included alchemy as one of its four pillars. The current thinking is that Arndt pursued both Lutheranism and Paracelsianism throughout his career and carried elements of both into his pastoral care.⁶⁶

One of the conference participants, Carlos Gilly of Basel University, asked his own, thought-provoking question: “Hermes or Luther”? He noted that Arndt wrote early on about the “Uralten Philosophie” (ancient philosophy), known in

fluences in the Reformation: *The Harvest of Medieval Theology: Gabriel Biel and Late Medieval Nominalism* (Cambridge, MA: Harvard University Press, 1963).

63 Hermann Geyer, *Verborgene Weisheit: Johann Arndts “Vier Bücher vom Wahren Christentum” als Programm einer spiritualisch-hermetisch Theologie*. Arbeiten zur Kirchengeschichte, 80.1–2 (Berlin and New York: Walter de Gruyter, 2001; reprinted 2015). Running to more than 1,300 pages in two volumes, the work presented the findings of a Ph.D. dissertation directed by the Arndt scholar Hans Schneider and presented to the theology faculty at the Philipps-Universität Marburg in 1998.

64 Monika Neugebauer-Wölk, “Esoterik und Christentum vor 1800: Prolegomena zu einer Bestimmung von Ihrer Differenz,” *Aries* 3.2 (2003): 127–65. Also see Stuckrad, review of Hermann Geyer, *Verborgene Weisheit* (see note 63), 239–41; and for Arndt's influence on Boehme, see Kristine Hankka, “Johann Arndt and the ‘Crisis of Piety’ of Jacob Böhme's Time,” *Jacob Böhme and His World*, ed. Bo Andersson, Lucinda Martin, Leigh Penman, and Andrew Weeks. Aries Book Series, 25 (Leiden and Boston: Brill, 2019), 145–66.

65 Papers from the 2005 conference were published in *Frömmigkeit oder Theologie: Johann Arndt und die “Vier Bücher vom wahren Christentum”*, ed. Hans Otte and Hans Schneider, Studien der Kirchengeschichte (Göttingen: Vandenhoeck & Ruprecht, 2007). For a detailed review of this book, see Douglas H. Schantz, review of *Frömmigkeit und Theologie*, *Lutheran Quarterly* 24.2 (2010): 241–44.

66 Mager, “Johann Arndts mystisch vertiefte Seelsorge, insbesondere Johann Gerhard gegenüber” (see note 24).

Renaissance Latin as the “*prisca philosophia*”; and that he counted Hermes Trismegistus among its “first heralds [ersten Verkündern].”⁶⁷ Scholars of Arndt’s time traced the concepts of macrocosm and microcosm (the great world of the cosmos and the little world of humans) to the Corpus Hermeticum as it was recorded in Greek in the early Christian era (perhaps the second century C.E.), though the terms themselves were doubtless added in the syncretic culture of the time to express the concept in the Egyptian tradition of the cosmos and humanity as creations in the image of God.⁶⁸

Closer to home, Gilly also made frequent references to Arndt’s early master Theodore Zwinger and to their continued correspondence over the remaining years of Zwinger’s life. As mentioned earlier, Zwinger was a devoted follower of Paracelsus and his alchemical medicine. Both he and Arndt were aware of the continuation of Paracelsian ideas in German religion – what Gilly has called *Theophrastia Sancta*.⁶⁹

Recent commentaries on Arndt’s *True Christianity* are curiously close to the earliest responses. Those written from a more doctrinal perspective respond most positively to Books 1 and 2, where the focus is primarily on the Bible. Commentators with more interest in mystical ideas, focus on Book 3 (the “Book of Conscience”) and Book 4. (the “Book of Nature”). And the writers who are prepared to go furthest from mainstream Lutheran thinking favor Book 4. It is difficult to escape the conclusion that Arndt knew exactly where he wished to go after his early book on iconography. He wanted to lead Lutheran readers gradually to the radical views expressed in his book of nature, showing that his thoughts were all available to those who read the Bible as he did.

Conclusion

There can be no doubt that Arndt succeeded in taking the esoteric thought of his early *Iconography* to the Lutheran readers of his day. *True Christianity* became one of most frequently reprinted books of the seventeenth and eighteenth centu-

⁶⁷ Carlos Gilly, “Hermes oder Luther” (see note 14).

⁶⁸ See Brian P. Copenhaver, “Introduction,” in *Hermetica: The Greek Corpus Hermeticum and the Latin Asclepius in a New English Translation*, ed. and trans. Brian P. Copenhaver (Cambridge: Cambridge University Press, 1992), xiii–lxi; here xxxiii–xxxiv. Also see pages 73–74; *Asclepius*, pars.11–12.

⁶⁹ Carlos Gilly, “*Theophrastia Sancta*: Paracelsianism as a Religion in Conflict with the Established Churches,” *Paracelsus: The Man and His Reputation, His Ideas and Their Transformation*, ed. Ole Peter Grell. Studies in the History of Christian Thought, 85 (Leiden, Boston, and Cologne: Brill, 1998), 151–85.

ries, going through almost as many German editions as the Luther Bible and replacing the *Imitatio Christi* as the most popular book of Christian mysticism among German-language readers.⁷⁰ Arndt's writing influenced many German-speaking people, from the Rosicrucian author Johann Valentin Andreae, who dedicated his model of a Christian Utopia to Arndt⁷¹; to Johann Sebastian Bach, whose copy of *True Christianity* was listed in the estate sale of his possessions⁷²; and Albert Schweitzer, who called Arndt "a prophet of interior Protestantism" such as he himself practiced.⁷³

The newly married pastor who alienated key members of his pastorate in Quedlinburg must have seemed an overly bookish man who resisted the freedoms that early Lutherans supposed they had, such as the freedom to remove religious art from their church buildings along with mention of the devil from baptismal services. His earliest writings, including *Iconographia*, showed great knowledge of religious symbolism based on the natural world, but it took him deep reflection on his role as a Lutheran pastor to see his way from the basic knowledge of Scripture to what he considered a true knowledge of God as presented in the Christian Bible. He must have realized early on, as he planned the four books that made up *True Christianity*, that knowledge of God came from knowledge of the creation and of mankind with all the sins and imperfections that set humans apart from the other life on earth and the other objects of creation visible to the naked eye.

Arndt must have made a decision that he never described in surviving letters or book chapters, printed or in manuscript. He must have decided that he would not try to be more than the son of a merchant and the pastor of a Lutheran community or the overseer of pastors in a small duchy. He also recognized that his most likely readers belonged to a newly urbanized Germany, whose relation to

70 Van Voorhis, *Johann Arndt* (see note 3), xi. At least 200 editions of *Vom wahren Christentum* were published during the eighteenth century.

71 Johann Valentin Andreae, *Republicae Christianopolitanae Descriptio* (Strasbourg: Heirs of L[azarus] Zetzner, 1619). See *Johann Valentin Andreae (1586–1986)*, ed. C[arlos] Gilly, 2nd ed. (Amsterdam: Bibliotheca Philosophica Hermetica, 1987), 124. On Andreae's influence in the emergence of Lutheran Pietism; see van Voorhis, *Johann Arndt* (see note 1) 73–76. I became interested in Arndt after finding evidence that he influenced Andreae's writing and notably the second Rosicrucian manifesto of 1615. The intellectual connection is made clear by the several dozen references to Andreae in volume 1 of Geyer's *Verborgene Weisheit* (see note 63).

72 Chris Gehrz, "Bach and Pietism," 20 Aug. 2014, <https://pietistschoolman.com/2014/08/20/bach-and-pietism-chuck-king/> (last accessed Aug. 16, 2023).

73 Quoted in Don O. Franklin, "J. S. Bach and Pietism," *Pietism* 7.1 (Spr. 1993), <http://www.pietisten.org/viii/1/bach.html> (last accessed on Aug. 16, 2023).

the natural world was as often through books as through forays in the barnyard and on the road from one place to another. He could hardly have imagined the readers he would acquire as Germans settled in the New World, but he assumed that, if they had their Luther Bibles, they would understand what he wrote.

The suggestion that Arndt wished to be known as something more than a simple Lutheran minister comes from an image of him published posthumously by the Braunschweig engraver Gottfried Müller (active 1626–1658).⁷⁴ The image shows the Rev. Dr. Johann Arndt late in life with gray hair and a long gray beard (see Fig. 3). It identifies him as a “distinguished theosophist,” a term he probably never used, though he knew it from writings of Paracelsus and Khunrath. The definition in the *Oxford English Dictionary* suggests why it might well apply to the author of “True Christianity” and especially its fourth book: “Any system of speculation which bases the knowledge of nature upon that of the divine nature.”⁷⁵ The word “theosophy” (Latin “theosophia”) goes back to the Greek θεοσοφία in the mystical philosophy of pseudo-Dionysius Areopagiticus. But it had a strong presence in early modern German writing from Paracelsus on to Weigel, and Arndt knew it well from Khunrath’s book, which identified the author as a theosophist in its title page engraving of him.⁷⁶

It was as a theosophist in the manner of his Basel teacher Theodor Zwinger and his guide to iconography Heinrich Khunrath that Arndt conceived of nature: as God’s creation summed up in the unfallen Adam.⁷⁷ As a Christian theosophist, he thought Adam’s fall from grace was not irreversible. For by repenting of one’s sins and learning the humility and obedience of one’s place as a child of God, one could begin to see oneself and one’s world as parts of God’s creation and, by a wonderful imaginative extension, as emanations of the Godhead. Had he become a physician like Zwinger, Arndt might have taken his personal motto from a sententious statement like this:

74 CERL Thesaurus, “Gottfried Müller (1626–1658),” <https://data.cerl.org/thesaurus/cni00030677> (last accessed on 11 Sept. 2023). The engraver signs himself “Paulus de Zepterre,” but I have been unable to identify him or the book in which his engraving appeared, if it was not issued separately.

75 *Oxford English Dictionary online*, “theosophy,” n. 1, def. 1, www.oed.com/dictionary (last accessed on Sept. 23, 2023).

76 Martin Žemla, “Heinrich Khunrath and His Philosophical Reform,” *Acta Comeniana* 31 (2017): 43–62. In his explicitly theosophical oration on the “universal chaos” or primal stuff of creation, Khunrath identified Nature with the Soul of the World (Anim Mundi) emanating from Jehovah himself; see id., *Confessio de Chao Physico-Chemicorum Catholico* (Strasbourg: Joh[ann] Albert, 1599), 7.

77 Neumann, *Natura Sagax* (see note 8), 133–44.

Deo duce, comite natura, experientia magistra invene via, ut huic morbo medicinam.”

[With God as guide, nature as a companion, find a masterly way to cure this disease.]⁷⁸

Meanwhile, Arndt's spiritualism is not to be underestimated at a time when increasing percentages of populations surveyed identify as “spiritual” rather than strictly Catholic or Protestant, while some say they are both spiritual and non-religious.⁷⁹

A recent study by Douglas Schantz suggests that German Pietism has brought much of the “radical underworld” of medieval and Restoration mysticism to the modern era – a personal spiritualism “mediated” by both Arndt and his contemporary Jacob Boehme.⁸⁰ This German trend in promoting the Christian doctrine of spiritual rebirth in order to see the Kingdom of God⁸¹ has entered the Protestant Episcopal Church in the U.S., which added Arndt and Boehme to its liturgical calendar in 2022. Their official feast day is celebrated on May 11, the day on which Arndt died in 1621.⁸²

⁷⁸ Johann Heinrich Alsted, *Systema Mnemonica Duplex* (Frankfurt a. M.: Paletheniana, 1610), 61; lib. 1, cap. 3. The first four words of this motto were used over the signature of Thomas Vaughan (1611–1666), an Anglican priest who turned to chemistry and medicine after being ejected from his rectory during the English Civil War. See Thomas Willard, *Thomas Vaughan and the Rosicrucian Revival in England, 1648–1666* (Leiden and Boston: Brill, 2022).

⁷⁹ See the Public Religion Research Institute's 2017 report “Searching for Spirituality in the U.S.: A New Look at the Spiritual But Not Religious,” [https://www.prri.org/research/religiosity-and-spirituality-in-america/#:~:text=specific%20religious%20tradition-,Only%20three%20in%20ten%20\(30%25\)%20spiritual%20but%20not%20religious,Buddhism%2C%20Hinduism%2C%20or%20Judaism](https://www.prri.org/research/religiosity-and-spirituality-in-america/#:~:text=specific%20religious%20tradition-,Only%20three%20in%20ten%20(30%25)%20spiritual%20but%20not%20religious,Buddhism%2C%20Hinduism%2C%20or%20Judaism) (last accessed on Sept. 22, 2023).

⁸⁰ Douglas Schantz, “German Pietism,” *Oxford History of Modern German Theology: Volume 1: 1781–1848*, ed. Grant Kaplan and Kevin M. Vander Schiel (Oxford: Oxford University Press, 2023), 56–79, here 59–61.

⁸¹ The scriptural basis of this movement is the conversation of Jesus and the Pharisee Nicodemus as reported in John 3, and especially the reference to being “born again” in 3:3.

⁸² The collect and Bible readings for that day, as they will appear in future prayer books, may be found online at <https://lectionarypage.net/LesserFF/May/ArndtBoehme.html> (last accessed on Sept. 23, 2023).



Fig. 1: First two-page engraving in Heinrich Khunrath's *Amphitheatrum Sapientiae Aeternae* (1605 edition); public domain image courtesy of the Science History Institute, Philadelphia.



Fig. 2: Title page of Arndt's fourth book of *True Christianity*, published as a separate volume in 1610 along with reprints of the first three books; public domain image courtesy of the Deutsches Textarchiv (DTA) within the Berlin-Brandenburgische Akademie der Wissenschaften.



Fig. 3: Posthumous engraving of Johann Arndt; public domain image courtesy of the digitized Portrait Databank at the University of Trier.

John Pizer

Imitation vs. Allegorization: Martin Opitz's Influential Proposal Concerning Poetic Reflections on Nature

Abstract: Martin Opitz (1597–1639) is widely regarded as the “father of German poetry” based on his treatise *Book of German Poetry* (*Buch von der Deutschen Poeterey*, 1624), as this was the first book written in the German language to elucidate a prescriptive poetics to be used for guidance by the nation's contemporary writers. His recommendations on the appropriate use of prosody, rhyme, alliteration, and genre-driven themes were highly influential for German-language poets in the early modern period. He also proposed in this work, in a rather cursory manner, that poetry should be based on the ideal imitation of nature, not existent nature, but nature as it could or should be. This means poetry should evoke the hidden essence of nature, not, as sometimes assumed, simply focusing on its pleasing, harmonious aspects. Critics have overlooked this latter aspect of Opitz's work when they associated it with the stale vraisemblance poetics of German Neoclassicism, exemplified by Johann Christoph Gottsched (1700–1766), who extravagantly praised Opitz in his own work.

My essay shows that Opitz was more aware of the historically conditioned character of poetry, which is to say the historical and social circumstances of the period during which it was composed, than was the case with Gottsched and the Frenchman Charles Batteux (1730–1780), who exercised an even stronger influence on German Neoclassicism than Gottsched. Based on a reading of Opitz's *Vesuvius: Poema Germanicum* (1633), my essay will demonstrate that Opitz's own poetic practice alternated between imitation and allegorization in a rather scientific portrayal of the eponymous Italian volcano (as well as vulcanism in general in this poem's paratexts) and in its representation of the eruption as a portent of divine wrath at the destructiveness of the Thirty Years' War. This ambiguity is also evident in Opitz's evocation of the natural sublime, anticipating the nature qua nature views of Immanuel Kant (1724–1804) and Edmund Burke (1729–1797) but also rooted in more mainstream eschatological German Baroque poetry. The conclusion will show the historical circumstances that generated such ambiguity in Opitz's poetic practice.

Keywords: Opitz, Gottsched, Batteux, Kant, Burke, allegory, nature imitation, the sublime, Thirty Years' War, poetics, *Vesuvius*

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Introduction

In his article “The Meaning of Art and Nature in German Baroque,” Gabriel Gersh cites Martin Opitz’s highly influential statement in his *Book of German Poetry* (*Buch von der Deutschen Poeterey*, 1624), that poetry is rooted in the imitation of nature, but not in the real existing nature in which we live. Real existing nature can be defined as the material world we and all concrete phenomena, organic and inorganic, occupy and which sentient beings perceive with their senses. In Opitz’s view, the poet must imitate the phenomena of the natural world in a manner not limited to their existent material dimension but as they could or should exist. Gersh notes that the idea of natural imitation is not new, but that Opitz’s prescription of poetically evoking an idealized nature is novel. Gersh, however, finds this proposition rather questionable:

By what idealistic principle are we to create ‘things as they ought to be?’ Opitz does not say. We can understand, however, from his whole critical work that art is fundamentally to be distinguished from nature, that the prosody of poetry is different from that of prose, and that the elements of poetry are gathered from some realm other than that of experience.¹

Gersh denies that Opitz’s *Buch von der Deutschen Poeterey* is informed by any originality, going so far as to claim that “In Opitz we have an extreme case of the purely formal, perfunctory use of ideas forged by others” such as Aristotle, Horace, and the Italian physician and man of letters, Julius Caesar Scaliger.²

It must be noted that Opitz did not claim that he was a great innovator; as was typical of his age, he explicitly cited significant ancient and contemporary exemplars for his perspective in order to lend historical authority to his prescriptions for the creation of German poetry as informed by carefully delineated prosody quite specifically attuned to a large number of genres and subgenres established by authoritative precedent. Indeed, most of the *Poeterey* is an instruction manual for creating lyric and epic verse in German which conforms to that language’s metric, rhythmic, and rhyming properties as well as to the genres heretofore established. In other words, the proposition for a poetry that imitated nature not as it is but as it should be takes up a rather limited amount of space in a work primarily devoted to establishing a detailed system of rules of prosody and genre. However, precisely the suggestion of an idealized imitation of nature was not only rather original for Opitz’s age but had a great impact on subsequent periods of German literature. To

¹ Gabriel Gersh, “The Meaning of Art and Nature in German Baroque,” *Comparative Literature Studies* 4.3 (1967): 259–65; here 260.

² Gersh, “The Meaning of Art and Nature” (see note 1), 259.

be sure, scholars of German literary history sometimes regard that influence in a negative light, for they see it as helping to foster the sort of stale *vraisemblance* paradigm associated with the Neoclassicism of Johann Christoph Gottsched in, primarily, the first half of the eighteenth century. Indeed, Gottsched wrote a highly laudatory homage to Opitz, establishing him as the father of German poetry and praising his poetic nature imitation paradigm, as we will see. Another highly influential figure for early eighteenth-century German literature was Charles Batteux, whose *Les beaux arts réduits à un même principe* (*The Fine Arts Reduced to a Single Principle*, first published in French in 1746) proposed that artists should pursue the idealized imitation of nature, an approach also advocated by Opitz but which greatly expanded upon the latter's rather tersely formulated paradigm.

Even Opitz's critics, such as Gersh, concede that his treatise on German poetry had an important influence on subsequent movements in that land. The following essay will primarily focus on the fact that his poetic nature imitation paradigm tacitly opposed the opinion prevalent in the Baroque age that the poet must allegorize the natural world. Advancing an alternative to this view by putting forth the opinion that the poet must create an idealized imitation of nature first enables the conceptualization of the natural sublime most famously explicated in the modern age by Edmund Burke and, under his influence, Immanuel Kant. To be sure, Baroque allegory is designed to trigger the feelings of awe and/or fear that Burke, Kant, and other moderns also associated with the sublime. However, these emotions are connected in Baroque allegory with divine manifestations in nature, rather than in the phenomena of nature in themselves, that is, natural phenomena considered as innate entities not to be regarded as simply part of an overarching divine cosmos.

In Burke, Kant, and other post-Baroque thinkers, the feelings aroused by these phenomena are rooted in nature *qua* nature, not in natural forces allegorically represented as tokens of godly power, even though Burke references poetic evocations of divine might in his *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (1759). Because these objects came to be considered as possessed of innate qualities and not simply part of a divine plan, they were regarded during the Enlightenment as subject to temporal flux. They were no longer seen as fundamentally unchanging entities in a fixed, static, godly hierarchical order. We will see that Opitz played a role in this transition.

To be sure, Opitz himself did engage in quite a bit of allegorization in his verse, which alternated its focus between the sacred and the profane, the godly and the secular. Indeed, Gersh is not incorrect in claiming that "Ronsard, Scaliger, Opitz, and the school of Renaissance critics had defined poetry as an 'allegorical

theology' in the sense that the poet explains in an image what, in its naked abstract form, is too difficult for men to understand."³ However, the allegorical and theological elements in Opitz's theory and poetic practice are balanced by an engagement with the natural world that evokes its majesty and its relationship to human society in a decidedly earthly, sensuous, nonreligious manner. Sometimes, in works such as his didactic poem *Vesuvius: Poema Germanicum* (1633), allegory and nature imitation, the sacred and the profane, the historical and the divinely infinite, even science and fabulation are so intertwined that only a careful reading can disentangle a tendency toward extreme overdetermination in this work.⁴

The following essay will show that, despite his engagement in typical Baroque allegorization, Opitz also evokes a more secular natural sublimity in his poetry. It will demonstrate how his book on the composition of German poetry paved the way for the formulation of the truly natural sublime in the eighteenth century, when European society was moving toward such secularization and away from popular, artistic, and critical perspectives which regarded art and religion as fundamentally and inextricably woven together.

My study will be organized as follows. In the first section, I will closely examine Opitz's poetic notion of nature as defined in the *Buch von der Deutschen Poeterey*, and how verse, particularly the poems Opitz wrote or translated for this work in order to illustrate his generic and prosodic principles put into practice what his paradigm proposes. Next, I will discuss both Gottsched's laudation of Opitz and how it shaped a more secularized view of vraisemblance during the German Enlightenment. In the next section, I will briefly discuss how the highly influential Batteux mirrored and expanded upon Opitz's idealized nature concept. I will then offer an interpretation of *Vesuvius* that seeks to disentangle its propensities toward both allegory and natural sublimity. This will be followed by a look at how its sometimes secular and non-religiously social naturalism creates an evocation of the sublime that anticipates the views of Burke and Kant but was inspired by Seneca. The conclusion will place the tension between allegory and nature imitation in Opitz's work into a historical context.

3 Gersh, "The Meaning of Art and Nature" (see note 1), 263.

4 A similar perspective on the sometimes-entangled relationship between allegory and a more factually oriented rendering of nature but focused on medieval works can be found in Albrecht Classen's essay "Medieval Epistemology and the Perception of Nature: From the *Physiologus* to John of Garland and the *Niederrheinische Orientbericht*. *Bestiaries* and the 'Book of Nature'," in the present volume.

The Idealized Concept of Nature in Opitz's *Book of German Poetry*

As the editors of Opitz's collected works have noted, the success of his *Poeterey* is attested to by the many imitations of his exemplary poems included in this treatise on the part of subsequent poets, its citation by numerous other works of poetic theory following its appearance, and its republication in new editions.⁵ Given its relative brevity, Bernhard Ulmer expresses surprise that his poetics "should have had so profound and far-reaching an effect not only in its own time but in subsequent generations." To be sure, as Ulmer further argues, the *Poeterey* primarily focuses on creating specific rules of genre, prosody, and versification, such as seeking to establish iambs and trochees as the most appropriate verse forms for German poetry.⁶ Nevertheless, despite the relative paucity of narrative space Opitz devotes to his poetic nature paradigm in comparison to his far greater attention to delineating the principles of German prosody, the paradigm also exercised a great impact on subsequent literary movements in his homeland, an impact that has social ramifications. Given its brevity, the passage is worth citing in full. After quoting a passage from Cicero expressing the view that poets tend to exhibit a partiality toward their own verse, Opitz expands this idea that writers of verse are biased toward their own compositions by suggesting they do not prioritize the truth:

Das ferner die Poeten mit der warheit nicht allzeit vbereinstimmen
ist zum theil oben deßenthalben Vrsache erzehlet worden
vnd soll man auch wissen
das die gantze Poeterey im nachäffen der Natur bestehe
vnd die dinge nicht so sehr beschreibe wie sie sein
als wie sie etwan sein köndten oder solten.

[That furthermore poets are not always in accord with the truth
is partially explained above with its cause
and one should also know
that poetry in its entirety consists in imitating nature
and does not describe things like they are
but how they could or should be.]

5 Martin Opitz, "Buch von der Deutschen Poeterey," *Gesammelte Werke* II.1, ed. George Schulz-Behrend. Bibliothek des literarischen Vereins in Stuttgart, 300 (Stuttgart: Anton Hiersemann, 1978), 331–414; here 334.

6 Bernhard Ulmer, *Martin Opitz*. Twayne's World Authors Series (New York: Twayne, 1971), 41.

This is the claim inherent in Opitz's valorization of idealized nature as a fundamental telos of lyric verse, but he also notes that people do not simply find delight in things ("die sachen") that exist in nature such as mountains, fields, and beautiful meadows. Rather, the concept also encompasses events people hear about but do not wish to witness, such as how Hercules murders his children, how Dido disembowels herself, and how plague rampages through entire countries.⁷ Indeed, Opitz's prescription of a poetry that idealizes nature is not to be equated with a portrayal of the natural world as always pleasing to the senses, beautiful, tranquil, and harmonious, though he does at times evoke such images. Rather, the main point of such a portrayal is that it be edifying and sometimes bring out the inner essence of the natural world normally hidden from view. This can mean the representation of nature as volatile and unstable, reflecting the instability of human life on our planet, as in *Vesuvius*. It can also mean the evocation of the starry firmament as a vantage point for contemplation of humanity as relatively insignificant, fleeting, petty in its earthly carnage-inducing wars, as he does in a Seneca-inspired passage in the same poem. Such representations of nature as terrifying and awe-inspiring also allow Opitz to evoke the sublime in a manner that anticipates the perspectives of Burke and Kant.

There are a number of elements that complicate any effort to regard the idealized nature proposal articulated by Opitz in his definition as anticipating the vraisemblance poetics of the Neoclassical Age dominant in the late seventeenth and early eighteenth centuries, such as that of Nicholas Boileau Despréaux (1636–1711). In the preface to his translation of Longinus's (213–273) treatise on the sublime, a translation which did much to revive this ideal in European discourse, Boileau proclaimed that the sublime lifts the soul beyond its quotidian existence because of "the grandeur of the thought and the nobility of the feeling, or from the splendor of the words" or the elegance of a writer's turns of phrase.⁸ Opitz, by contrast, suggests that the occlusion of powerful images of death and devastation, society's delight in hearing but not witnessing horrific events both in Greek mythology as well as in tales of contemporary war and plague-ravaged Europe, is what concomitantly delights and terrifies the masses. This association of obscurely represented deathly spectacle with the imbuing of edification but also delight among the people ("vnter-richt auch ergetzung der Leute")⁹ comes close to anticipating the contours of the Burkean sublime, which is often triggered precisely by such occluded representa-

7 Opitz, "Poeterey" (see note 5), 350–51.

8 Nicholas Boileau Despréaux, "From the Preface to His Translation of Longinus On the Sublime (1674–1701)," *The Sublime Reader*, ed. Robert R. Clewis (London: Bloomsbury Academic, 2019), 57–61; here 57.

9 Opitz, "Poeterey" (see note 5), 351.

tion of terrifying and horrifying events evident in the natural world.¹⁰ Furthermore, in citing Cicero's comments on the propensity of poets to valorize the merits of their own verse prior to stating in his own German that poets are not always in accord with the truth, the very possibility of the verisimilar imitation of nature is called into question. In other words, even if poetry consists in the "aping" (the literal translation of "nachäffen") of nature, the poetic ego gets in the way of such imitation, so that the poet can only represent nature as it could or should be, not as it actually exists. Here, of course, Opitz anticipates Kant's core tenet that humans cannot accurately perceive things in themselves, although Opitz infers that creative vanity rather than the epistemological limits of human perception is what makes an accurate imitation of nature an impossibility.

In noting that poets do not always compose their verse in concordance with the truth, Opitz refers the reader back to an earlier passage in the *Poeterey* at the beginning of chapter two. Here he notes that because straightforward religious precepts concerning wisdom and heavenly matters could not be comprehended by the coarse and barbaric world during poetry's earliest age, the wise men of yesteryear had to inculcate truth concerning the necessity of the fear of God ("Gottesfurcht"), proper behavior, and social intercourse through "rhymes and fables." As God was an ineffable being ("vnbegreifliches wesen"), the natural bodies in the firmament – the sun, moon, and stars – had to be drawn upon in order to imbue the masses with a sense for divine truth. Indeed, Opitz opens this chapter of the *Poeterey* by stating that "poetry is, at the beginning, nothing but a hidden theology ('verborgene Theologie') and instruction concerning divine matters."¹¹ Juxtaposing this passage with the previously cited articulation of poetry as the idealized imitation of nature, it seems apparent that Opitz regards poetry in his age as no longer having the character of a hidden theology, but poetry's fictitious, indeed mendacious, character remains part of its essence in the present day. This view permits the sort of secular, profane verse in which Opitz frequently indulged, but his Cicero-inspired belief that poets are imbued with a solipsistic narcissism infers that poetry is still not capable of giving expression to direct truths. From this perspective, Opitz seems to imply that poetry cannot simply imitate or "ape" nature not only because society's

¹⁰ On this aspect of the Burkean sublime, see Kiene Brillenburg Wurth, "Burke, Bartram, and the Sublime: The Spectacle of Death and the Limits of Representation," *Revolutions & Watersheds: Transatlantic Dialogues 1750–1815*, ed. W. M. Verhoeven and Beth Dolan Kautz. Dutch Quarterly Review of Anglo-American Letters / Studies in Literature, 26 (Amsterdam and Atlanta, GA: Rodopi, 1999), 27–37.

¹¹ Opitz, "Poeterey" (see note 5), 344.

masses are still incapable of being educated in this manner, but also because poets are constitutionally incapable of giving expression to unmediated natural truths.

Even more importantly for our purposes, the introduction to chapter two of the *Poeterey* at least tacitly implies not only that poetry is inherently incapable of engaging with nature in a manner that will convey absolute truths that can be epistemologically grasped by society's masses, but that allegory is no longer the instrument most suited to at least guiding people to instruction in godly matters ("vnterricht von Göttlichen sachen"). In the ancient past, according to Opitz, those who employed poetry as a "hidden theology" did so because crude society needed to be instructed in God's inscrutable ways by means of the most awe-inspiring visual imagery that nature provides, the sun, moon, and stars. Ancient wise men suggested to their uneducated followers that the objects in the heavenly firmament were in fact "good spirits of the heavens," even God's sons and companions, whom we humans must honor. As an example of this approach to guiding the ancient masses, Opitz cites the books of Zoroaster. To be sure, one might argue that portraying the objects of the firmament as divine beings is not, in fact, an instance of allegory, for in conventional allegory such objects would suggest awe-inspiring natural phenomena which, through figuration, express awesome divine power, but do not directly exist as supernatural beings. However, Opitz implies that ancient wise men did not themselves regard the celestial objects as unmediated divine bodies but had to employ allegory in order that their societies might have a sense of the existence of God, who is otherwise an essence which cannot be comprehended.¹²

Opitz clearly indicates that poetry need no longer function as nothing but a "hidden theology ('verborgene Theologie') and instruction concerning divine matters."¹³ To be sure, this should not be taken to mean that there was no sincere religious impulse in Opitz's œuvre. Some scholars have indeed suggested Opitz's work was primarily informed by secular political rather than religious impulses, but Richard D. Hacken effectively argued quite some time ago that this is not the case.¹⁴ As we will see, Opitz himself employed religious allegories in his verse. The point here is not that Opitz regarded the idealized imitation of nature as fundamental to modern poetic practice in dealing with the environment. Rather, he finds that allegory as the *sine qua non* of a pedagogically driven poetry that must function as a hidden theology has been superseded in his more sophisticated age.

¹² Opitz, *Poeterey* (see note 5), 344.

¹³ Opitz, *Poeterey* (see note 5), 344.

¹⁴ Richard D. Hacken, *The Religious Thought of Martin Opitz as the Determinant of his Poetic Theory and Practice*. Stuttgarter Arbeiten zur Germanistik, 18 (Stuttgart: Hans-Dieter Heinz, 1976).

By arguing that poetry must no longer be equated with a hidden theology, Opitz implies that allegory is no longer essential to poetry. He indicates that theology had been hidden in early times in an allegory not perceived by the masses as such. Today, because the need to provide this hidden theology is gone, the modern poet is free to create verse which fundamentally imitates nature, albeit an idealized nature, a nature that cannot be grasped in its immanent phenomenological character. In other words, Opitz does not pursue a telos of realism in his theory and in his poetic practice. Natural objects in their noumenal essence cannot be represented because doing so would necessitate writing in a prelapsarian language where there is no separation between signifier and signified, a language that has not existed since the Fall from grace.

Opitz continued to employ allegory precisely in the service of revealing what he refers to here as an outmoded means of uncovering a hidden theology, a practice we will see evident in the *Vesuvius* poem. However, the liberation Opitz underscores in his time from the need to write a theologically oriented poetry couched in a tightly circumscribed allegoric practice allows him to suggest the possibility of freely engaging the poetic imagination at the outset of the fifth chapter of the *Poeterey*. Opitz alludes to this possibility in referring to the necessary poetic practice of inventing or fabricating (“invention oder erfindung”) objects.¹⁵ He goes on to argue that “Die erfindung der dinge ist nichts anders als eine sinnreiche faßung aller sachen die wir vns einbilden können” (The fabrication of things is nothing but a sensual rendering of all objects that we can imagine), whether of the earthly or heavenly realm, living or devoid of life.¹⁶ Here is Opitz’s most untrammelled embrace of not only the freedom, but indeed the necessity, of engaging one’s imagination in the service of poetic composition. When juxtaposed with his comment on poetry’s earlier status as a hidden theology, Opitz can be seen here to make an unsubtle distinction between the allegorization of nature to reveal the imprint of divine order and the unencumbered use of the imagination to sensually render the objects of both the divine and earthly/natural realms. To be sure, however, Opitz’s licensing of the poetic imagination here is not without constrictions. The *Poeterey* is always attentive to the genre-based rules that must guide the composition of German verse, and the subsequent pages of chapter five show different poetic forms, such as heroic poetry, tragedy, eclogues, comedy, and satire, will channel the flow of poetic imagination along rather circumscribed lines.¹⁷ This latter tendency is what endeared Opitz to Gottsched as a model for

¹⁵ Opitz, “*Poeterey*” (see note 5), 359.

¹⁶ Opitz, “*Poeterey*” (see note 5), 360.

¹⁷ Opitz, “*Poeterey*” (see note 5), 360–71. Opitz’s line concerning the “fabrication of things” is a reworking of Pierre Ronsard’s (1524–1585) more Neoplatonic view that “invention” is nothing but

his own writing of a critical work on German poetic composition in the eighteenth century, while his groundbreaking embrace of engaging the poetic imagination in portraying nature helped gain him the admiration of Johann Gottfried Herder. These valorizations of Opitz by German men of letters who held otherwise antithetical views on the nature of poetic composition will be briefly discussed later in this essay.

Broadly speaking, and consistent with the discussion of literary genres in chapter five of the *Poeterey*, Opitz's book on German poetry is informed by his insight that the poetic imitation of nature is constricted by the metric and rhythmic schemes most suitable to the unique properties of the German tongue. Opitz cites a couplet from Virgil's verse on Aetna and contrasts it with a Dutch rendition by Daniel Heinsius. It should be noted that Opitz cites Virgil's Aetna verse here simply to illustrate his prosodic point, not, as will be the case with the Vesuvius poem discussed later in this essay, for thematic purposes. Without this context, Opitz's translation would appear to engage in a poetic naturalism:

Wie Etna / wenn er strewet
Die flammen in die luft / vnd siedend' hartz außpeyet /
Vnd durch den hollen schlund bald schwartze wolken bläßt /
Bald gantze klüfften stein' vnd kugeln fliegen lest.

[Like Aetna / when it streams the flames in
the air / and spits out boiling resin /
And blows black clouds through the hollow abyss
Soon causes whole clumps of stone and balls to fly.]

the natural undertaking of an imagination acting to perceive all ideas and forms, celestial or earthly, in order to represent, describe and imitate them (Ronsard, cited in Opitz, "Poeterey" [see note 3], 360). Volkhard Wels has argued that Opitz's rendering of Ronsard's lines strips them of their Neoplatonic nuance and reconstitutes them into a purely "rhetorical technical model" which formally renounces the idea of imagination, essentially "degrading" the ideas to objects. The bulk of chapter five tends to sustain Wels's argument, as Opitz elucidates the objects rendered by the artist as governed wholly by the formal rhetorical principles inherent in the various literary genres. Indeed, Opitz argues that what is most important with respect to the poetic imagination is the adroit and proper division of the fabricated objects (Opitz, "Poeterey," 360). However, Opitz's use of the term "einbilden" (imagine) in his rendering of the passage by Ronsard indicates he allows a certain freedom to the poetic imagination's urge to employ invention in its rendering of the natural and terrestrial realms, a perspective somewhat at odds with the principles of biblical allegoresis he at other times embraced. See Volkhard Wels, "'Verborgene Theologie', Enthusiasmus und Andacht bei Martin Opitz," *Daphnis* 36 1.2 (2007): 223–94; here 225.

However, placing his rendering between the original Latin and the Dutch text,¹⁸ Opitz makes us aware that his verse does not capture the essential character of the erupting volcano, but only a specifically German narration of that event, both enabled and limited by the characteristics of German prosody. As Volker Meid notes regarding Opitz's poetic imitation of nature concept, this author realized that the glimpse of natural reality is distorted by social and poetological conventions, and the poet only has snippets ("Ausschnitte") of historical reality at his disposal, which is to say objects that must be treated in an appropriate and plausible manner.¹⁹ In other words, nature qua nature cannot be poetically conveyed to the reader or auditor in its noumenal essence. The poet cannot provide such an unalloyed insight into nature because such a transmission is conditioned by history, social circumstances, and the epistemological as well as prosodic limitations of postlapsarian languages. These same limitations also constrict the ability of societies of readers and listeners to comprehend, without impediments of any kind, the vision of nature the poet conveys.

Thomas Borgstedt has argued that "imitatio" poetics are essential to an adequate understanding of Opitz's literary work, for "systematically conducted imitation" ("systematisch durchgeführte Nachahmung") impacts this work to an unmatched extent. Borgstedt finds that by the time of Opitz's age, the aporias of "imitatio" had been overcome to such a degree that a puristic imitation doctrine no longer remained. According to Borgstedt, the primary telos of Opitz's imitation-grounded poetics is to provide German poets of his time with practical, politically useful guidelines imprinted by the love of the fatherland. "Imitatio" thereby takes on a purely propaedeutic character, stripped of the ancient perception of this principle as conveying unalloyed truth.²⁰

I would agree with Richard Hacken's previously cited thesis that Opitz's *Poeterey*, and his work in general, has as strong a religious dimension as it does a political perspective, and we will see that the puristic "imitatio" doctrine seems to have returned in the aesthetic theories of Gottsched and Batteux. Nevertheless, Borgstedt's book chapter not only establishes a plausible link between "imitation and utility" – "Nachahmung und Nützlichkeit" is the title of his essay – but provides a historical context for Opitz's poetic imitation of nature paradigm that sets it off from previous discourses from ancient times through the Renaissance and

¹⁸ Opitz, "Poeterey" (see note 5), 378–79.

¹⁹ Volker Meid, *Barocklyrik*. Realien zur Literatur 227 (Stuttgart: J. B. Metzler, 1986), 26.

²⁰ Thomas Borgstedt, "Nachahmung und Nützlichkeit: Renaissance Diskurse, *Poeterey* und Monumentsonette," *Martin Opitz (1597–1639): Nachahmungspoetik und Lebenswelt*, ed. Thomas Borgstedt and Walter Schmitz. Frühe Neuzeit, 63 (Tübingen: Max Niemeyer, 2002), 53–72; here 64–65.

does allow the originality of *Poeterey* as a politically inflected practical handbook for contemporary German poets to emerge.

Borgstedt's underestimation of the religious dimension of *Poeterey* is made evident at the book's conclusion, where Opitz equates divine with natural inspiration for elevated poetry, drawing on the wisdom of Ovid, Plato, and the French poet Joachim du Bellay.²¹ This equation of the natural and the divine is confirmed in the treatise's closing lines where Opitz proclaims "Wir folgen dem / an welches vns Gott vnd die natur leitet"²² (We follow that through which God and nature guide us). However, Borgstedt is on firmer ground when he states that Opitz rejected an allegorical dimension in love poetry, the interpretive as well as compositional trend for this genre in the Christian Middle Ages and in humanistic Neoplatonic discourses on love.²³ This is also to a large degree the case with the *Poeterey*'s treatment of nature.

Opitz cites his own ode in prescribing the guiding principles of short poetry, articulating what are the appropriate themes for this genre. After indicating his odious feeling about having spent too much time with Plato, the ode proclaims:

Es ist zeit hienauß zue schawen /
Vnd sich bei den frischen quellen
In dem grünen zue ergehn /
Wo die schönen Blumen stehn /²⁴

[It is time to look outside
and at the fresh springs
to revel in the greenery
Where the lovely flowers stand]

These images in nature – fresh springs, greenery, lovely flowers – have no allegorical significance, but simply constitute the sort of bucolic phenomena Opitz finds appropriate for short verse, and he uses his own mastery of German prosodic principles to evoke the enchantment of the outdoors. In his celebrated book *Mimesis* (1946), Erich Auerbach does not mention Opitz as exemplary of the sort of mimetically grounded representational realism of Occidental literature, largely in the Middle Ages and early modern period, that is the focus of this book, and I have already argued that Opitz eschewed poetic realism. However, Auerbach argues that Renaissance sensualism and vigor finally overcame the choking parasitic vine ("Schling-

²¹ Opitz, "Poeterey" (see note 5), 409.

²² Opitz, "Poeterey" (see note 5), 414.

²³ Borgstedt, "Nachahmung und Nützlichkeit" (see note 20), 67.

²⁴ Opitz, "Poeterey" (see note 5), 370.

pflanze”) of allegory, which was threatening to suffocate serious realism in France and north of the Alps in general.²⁵ If we follow Auerbach’s informed sense of European poetic history, then we might proclaim that Opitz lived in an age when contemporary literature had been sufficiently freed from the clinging vine of allegory, that love could be represented as a purely human emotion devoid of divine significance, and flowers, springs, and verdancy are simply natural phenomena in which the poet can physically and verbally revel.

Furthermore, in celebrating nature qua nature, Opitz indicates the poet should strive to imitate it even at the phonetic level. Thus, in capturing the flowing, welling-up sound of a natural spring, Opitz advocates the prodigious use of the letters “L” and “R,” given their fluid tones in German, and creates the following line of verse to illustrate their onomatopoetic quality: “Der klare brunnen quilt mitt lieblichem gerausche”²⁶ (The clear spring babbles with lovely tones). Here is an instance of Opitz’s embrace of utilizing prosody for the purely secular evocation of the beauty of nature in poetry. He implies in this brief verse that it is not always necessary to allegorize nature in poetry to demonstrate the divine order behind such beauty.

The Imitation of Nature in the Enlightenment Age: Gottsched in the Wake of Opitz

When Opitz declares that poetry used to be a hidden theology and makes it clear that the rules of composition as well as thematic and prosodic principles he develops in the *Poeterey* are specifically suited to German language verse writing in his age, he displays a certain historical consciousness. By contrasting German creative principles with those prevalent in ancient Greece and Rome, as well as French, Italian, and Dutch, he indicates, albeit not explicitly, that his rules do not possess an all-encompassing normative character applicable to the writing of all times, places, and in all languages. To be sure, he upheld particularly Greek and Roman writers as models who can provide guidance to contemporary German poets. However, as Marian Szyrocki indicates in his critical biography of the poet, Opitz believed this activity can be recommended as leading to the enrichment of German vocabulary and poetic forms,²⁷ and he is not prescribing an ahis-

25 Erich Auerbach, *Mimesis: Dargestellte Wirklichkeit in der abendländischen Literatur* (Bern: A. Francke, 1946), 249.

26 Opitz, “Poeterey” (see note 5), 379.

27 Marian Szyrocki, *Martin Opitz* (Berlin: Rütten & Loening, 1956), 66.

torical imitation of the ancients in all particulars. Opitz is often regarded as an early Enlightenment figure; an important recent monograph on this author is even entitled *Der Reformator und Aufklärer Martin Opitz*²⁸ (The Reformer and Man of the Enlightenment Martin Opitz). Two other men of letters associated with this movement, Johann Christoph Gottsched and Charles Batteux will be examined in the following sections. Gottsched is discussed because his laudation extolling Opitz clearly shows the impact Opitz had on his own poetic theory and principles. I look at Batteux because his *Les beaux arts réduits à un même principe*, which had a far greater influence on German literary theory than it did in Batteux's native France, sometimes reads like a fleshed-out, elaborated version of Opitz's thesis that poetry represents, in its highest form, the idealized imitation of nature. However, to a large degree, Gottsched and Batteux lacked Opitz's incipient historical consciousness. Their genre theory was largely ahistorical, devoid of a sense of how literary forms are conditioned by time, place, and language.

Gottsched's *Versuch einer Critischen Dichtkunst vor die Deutschen* (Essay on a Critical Poetry for the Germans, 1730) was the first substantive German-language poetics to appear since Opitz's *Poeterey*. Like Opitz in his *Poeterey*, Gottsched draws heavily on the ancients to substantiate his critical poetic principles, and it is quite clear that Opitz's work strongly influenced his views. Also like Opitz, Gottsched not only looked to Latin and Greek but also to contemporary European authors in order to substantiate his delineation of the various literary genres he wishes Germans not only to comprehend but to regard as role models for their own creative work.

However, the broad purport of the *Critische Dichtkunst* is distinct from that of the *Poeterey*, and this also extends to his views concerning the appropriate poetic imitation of nature. Gottsched was influenced by the thought of Christian Wolff, an early Enlightenment philosopher whose epistemology reflected a positivistic faith in timeless, which is to say ahistorical as well as universal, categories of various kinds. Gottsched's *Critische Dichtkunst* sustained this perspective and directed it toward the defense of the eternal validity of poetic genres and compositional rules, something Opitz, a creative poet himself who saw his poetics as a guide exclusively for German-language authors of his own age, would certainly have rejected. However, Gottsched was oblivious to this circumstance, and, as Uwe-K. Ketelsen has indicated, he not only lauded Opitz as a German patriot and

28 Klaus Garber, *Der Reformator und Aufklärer Martin Opitz (1597–1639): Ein Humanist im Zeitalter der Krisis* (Berlin and Boston: Walter de Gruyter, 2018).

a hero of poetry but extolled the Silesian for his successful poetic imitation of nature in their common mother tongue.²⁹

How can Gottsched justify the principle of universally valid criteria for the appropriate composition of poetic works and the appropriate parameters for the various genres, regardless of time and place? He is certainly not so blind to the vagaries of history and geography as to believe that humanity and human qualities have remained constant through the centuries, but he argues that the basis for the principles guiding composition, judgment, and good taste are rooted in the nature of things, thus unchanging due to their nature-based immanence: “Die Regeln nämlich, die auch in den freyen Künsten eingeführet worden, kommen nicht auf den Eigensinn der Menschen an; sondern sie haben ihren Grund in der unveränderlichen Natur der Dinge selbst” (The rules namely, that were also introduced into the liberal arts, do not depend on the obstinacy of people. Rather, they have their basis in the unchangeable nature of the things themselves). In Gottsched’s view, there is diversity in the natural world, but there is an essential accord (“Übereinstimmung”) among its objects, an indwelling order and harmony not subject to human vagaries and inconsistencies,³⁰ which are certainly subject to historical flux.

In his laudation of Opitz, Gottsched claims he became acquainted with the true beauties of nature through his gradual familiarity with the examples and rules of the ancients, and he praises Opitz for imitating them. In this passage, it would appear that Gottsched commends Opitz for imitating *both* the ancients and nature itself: [. . .] “je mehr ich aus den Exempeln und Regeln des Alterthums, mit den wahren Schönheiten der Natur bekannt ward: desto höher lernte ich einen Mann schätzen, der dieselben in unserer Muttersprache zuerst so glücklich nachgeahmet hat” ([. . .] The more I became familiar through the examples and rules of antiquity with the true beauties of nature, the more I learned to treasure a man who was the first to so successfully imitate them in our mother tongue).

In this passage and in the title of his laudation, Gottsched calls Opitz the father of German poetry.³¹ Nevertheless, Opitz never displays in the *Poeterey* the

29 Uwe-K. Ketelsen, “Auf den Flügeln des patriotischen Eifers über das Gestrüpp der Sätze: Gottsched rühmt Opitz,” *Opitz und seine Welt: Festschrift für George Schulz-Behrend zum 12. Februar 1988*, ed. Barbara Becker-Cantarino and Jörg-Ulrich Fechner. *Chloe: Beihefte zum Daphnis*, 10 (Amsterdam and Atlanta, GA: Rodopi, 1990), 267–86; here 282.

30 Johann Christoph Gottsched, *Versuch einer Critischen Dichtkunst vor die Deutschen*, 4th ed., VI.1 (1730; Leipzig: Christoph Bernhard Breitkopf, 1751), 174.

31 Gottsched, “Lob- und Gedächtnißrede auf den Vater der deutschen Dichtkunst, Martin Opizen von Boberfeld,” *Ausgewählte Werke*, ed. Joachim Birke and P. M. Mitchell (Berlin: Walter de Gruyter, 1976), 157–92; here 161.

extreme ahistoricism in his discussion of the poetic imitation of nature and the compositional contours of the literary genres evident in Gottsched's *Versuch*. To be sure, however, he was at least equally attuned as was Gottsched to the inconsistencies and vagaries of human individuals and human society, and hoped poetry would help ameliorate these conditions of through its idealized imitation of nature.

Charles Batteux's Influential Poetic Imitation of Nature Principle: Its Parallels to and Differences with Opitz's and Gottsched's Views

While Charles Batteux was most likely not influenced directly by Opitz's idealized nature proposal, it is worthwhile briefly to examine his aesthetics, for they not only had a far greater impact than those of Gottsched on eighteenth century engagements with a poeticized nature but can be seen as a reformulation of Opitz's rather terse but highly influential paradigm that is both more expansive and more reductive than that of Opitz. It is expansive in that the entirety of Batteux's text is devoted to explaining and defending the principle that the idealized poetic imitation of nature is the only legitimate goal of all the arts. As the title of his treatise, *Les beaux arts réduits à un même principe*, indicates, however, Batteux literally wants to reduce the scope of the arts in their entirety to this one core principle, and in this sense the work is reductive in the extreme. Gottsched not only endorsed Batteux's approach, but offered a partial translation of his text, "Auszug aus des Herrn Batteux Schönen Künsten, aus dem einzigen Grundsatz der Nachahmung hergeleitet" (Excerpt from Mr. Batteux's Beautiful Arts, Derived from the Single Principle of Imitation, 1754). He did, however, express irritation at the circumstance that Germany's Francophile men of letters were more influenced by Batteux's aesthetics than his own simply because they were written in French by a Frenchman.³²

Though, of course, French was quite literally the lingua franca of intellectual Germany in the Enlightenment age of Gottsched and Batteux, the latter's contribution to the discourse in that land on an idealized poetic nature imitation was

³² Gottsched, "Vorrede zum Auszug aus des Herrn Batteux Schönen Künsten, aus dem einzigen Grundsatz der Nachahmung hergeleitet," cited in John Pizer, *The Historical Period in German Genre Theory: Its Development from Gottsched to Hegel*. Stuttgarter Arbeiten zur Germanistik, 160 (Stuttgart: Hans-Dieter Heinz, 1985), 46–47.

mainly filtered through the translation into German of *Les beaux arts* by Karl Wilhelm Ramler (1756–1758) and Johann Adolf Schlegel (1751). Schlegel's introductory comments, addressed to the noted contemporary author Christian Fürchtegott Gellert, is actually somewhat critical of Batteux's reductionism.³³ In a treatise appended to the translation, Schlegel credits Opitz as the first to give German poetry a form ("Gestalt"), and expresses regret that the path Opitz laid has been abandoned.³⁴

Unlike Opitz and Gottsched, Batteux was not interested in establishing normative precepts for poets, or any other artists, to follow. Rather, in line with his proposition that the arts can be reduced to the single principle of the idealized imitation of nature, Batteux leaves it to the discretion of the creative individual to seek guidelines in nature itself or, if that proves too difficult to do, to use the ancients as role models.³⁵ This focus on artistic freedom, and Batteux's recognition that taste can vary according to time and place, somewhat tempers the ahistorical character of his reductive poetics.³⁶ However, even if Opitz, like Gottsched but unlike Batteux, created a somewhat normative approach to composing poetry in the German language in the *Poeterey*, his views are less ahistorical than those of Gottsched. This is evident in the positive reception of Opitz as a literary figure by Herder, whose views on the relationship between history and poetics were absolutely antithetical to those of Gottsched and Batteux.

That is to say, if the literary theories of Gottsched and Batteux were almost completely ahistorical and based on a universally normative poetics, Herder believed that all poetry, indeed all literary forms, were completely subject to historical, social, and even climatological variables, and must be judged accordingly. Thus, he was extremely critical of the aesthetics espoused by Gottsched and Batteux, and substantially contributed to the loss of their influence in the post-Enlightenment age.³⁷

On the other hand, Herder was full of praise for Opitz. To be sure, this praise was primarily focused on Opitz's poetic output. Herder lauded Opitz's diction for

33 Johann Adolf Schlegel, "An Herrn Christian Fürchtegott Gellert," Charles Batteux, *Einschränkung der schönen Künste auf einen einzigen Grundsatz: Aus dem Französischen übersetzt und mit Abhandlungen begleitet von Johann Adolf Schlegel. Zwei Teile in einem Band* (1770; Hildesheim: Georg Olms, 1976), v–xxvi.

34 Schlegel, "Vom Reime," Charles Batteux, *Einschränkung* (see note 33), II.515.

35 Charles Batteux, *Les beaux arts réduits à un même principe*, in *Principes de la littérature*, 5th ed. (1775; Geneva: Slatkine, 1967), 125–26.

36 See the discussion in Pizer, *The Historical Perspective in German Genre Theory* (see note 32), 62–63.

37 See the discussion in Pizer, *The Historical Perspective in German Genre Theory* (see note 32), 112–45.

its liveliness and pithiness, for the power and expressiveness in Opitz Herder regarded as a carryover from the age of Luther. In this regard, Opitz, in Herder's view, was less significant as an educated humanist than as an authentically popularizing poet who contributed to creating a link to the common people, the *Volk*, whom Herder never tired of adulating.³⁸ However, Herder was clearly quite sensitive to the sort of ahistorical normative poetics of Enlightenment figures like Gottsched and Batteux and would almost certainly have criticized a similar tendency had he found one in Opitz's *Poeterey*, but this was not his focus when he analyzed Opitz's oeuvre.

The Tangled Poetic Impulses in Opitz's Didactic Poem *Vesuvius*

Poema Germanicum: Nature Imitation, Allegory, and Lessons for Society

On 16 December 1631, Mount Vesuvius underwent a massive eruption which brought about the destruction of nearby villages that were buried beneath the mountain's volcanic flows, resulting in the death of some 4,000 people. The period of eruptions did not cease until the following year. Of course, the Italian volcano had erupted numerous times prior to 1631, most famously in 79 C.E., when it destroyed the ancient Roman cities of Pompei and Herculaneum, and it has erupted many times since. The 1631 catastrophe occurred in the midst of the Thirty Years' War, so not surprisingly it was interpreted as a token of divine wrath. The event inspired Opitz to compose a didactic poem, *Vesuvius. Poema Germanicum*. The composition is informed by a high degree of allegory, and the application of allegoresis to Opitz's verse certainly leads to fruitful insights into how Opitz instrumentalized a natural catastrophe in order to admonish his readers that God brought about the cataclysm as a punishment for the human conflict that was visiting death and ruin throughout Europe, but particularly in the German-speaking territories. However, the didacticism of the poem is as much driven by the impulse to convey scientific information grounded in the nascent domain of vulcanism as it is a religious exhortation to regard the calamity of the eruption as reflecting divine rage.

³⁸ For a brief overview of Herder's positive reception of Opitz, see Garber, *Der Reformator und Aufklärer Martin Opitz* (see note 28), 15.

Indeed, *Vesuvius* is not only informed by both theological and scientific discourses designed both to educate and admonish learned German-speaking society, but also contains instances of idealized nature imitation of the sort Opitz advocated and illustrated in the *Poeterey*. The fusion of three strands – scientism, religiosity, and poetic nature imitation – combine at times to evoke a sense of the natural sublime discussed by Burke and Kant. Finally, *Vesuvius* can be regarded as a transitional work between periods in which nature was seen to reflect a divine order and was thus perceived as stable and cyclical even if sometimes destructive, and a later Enlightenment era in which nature was historicized and an immersion into its majesty began to substitute for religious experience.

Vesuvius belongs to the genre of didactic poetry; critics classify it as a *Lehrgedicht*. However, in terms of sheer volume, it is far more a work of didacticism than of poetry. That is to say, the learned disquisitions of its Latin-language paratexts greatly outweigh, in terms of volume, its poetic verse. The long preface dedicated the poem to Johann Christian von Brieg, one of the Protestant dukes for whom Opitz engaged in diplomatic service. This prefatory dedication and most of the other paratexts are constituted both by scientific discourse on vulcanism and the explanation of his view of nature as God's creation, a creation replete with signs of God's wrathful attitude toward humanity.

The subtitle of the work, *Poema Germanicum*, is a clear signal in a poem the title of which signifies an Italian volcano that the divine rage is primarily caused by the depredations of the Thirty Years' War. As Barbara Becker-Cantarino notes in her essay "Vesuvius. Poema Germanicum: Opitz und der Dreißigjährige Krieg," this subtitle clearly points the reader to contemporary circumstances in Germany and transforms the natural catastrophe of the seventeenth-century eruption of Vesuvius into a mirror of Germany's suffering in a manner that calls into question scholarly assertions that Opitz simply took Lucilius's engagement with the volcano during Roman antiquity and broadened its purport in the pursuit of his pedagogical goal.³⁹

This educational telos, we may add, was partially theological in nature, and elucidating the eruption of a foreign volcano as a sign of God's fury at the events taking place much farther to the East made it inevitable that Opitz would imbue this poem with a large degree of allegorical signification. His wish that the poem also be understood as a scientific discourse on vulcanism demonstrates its threshold character, chronologically situated between a period when nature was regarded as constant and fundamentally unchanging because subject to divine order,

39 Barbara Becker-Cantarino, "Vesuvius. Poema Germanicum: Opitz und der Dreißigjährige Krieg," *Daphnis* 11.3 (1982): 501–18; here 501.

and a secularism in the late Enlightenment which regarded nature as subject to temporal change and indeed, to history. Thus, the allegorical element in *Vesuvius* reflects a still dominant religiosity in Opitz's Baroque age, while its more scientific element is informed by the tendency to treat nature qua nature, nature as subject to both immanent and dynamically variable forces. This aspect of *Vesuvius* is sometimes evident in verse which seems to reflect Opitz's idealized nature proposition.

In the prefatory dedication to the duke, Opitz emphasized that he wished to make the “*natural causes* of the firestorm” the subject of a poem, a natural event which one year earlier had threatened to set all of Italy's Campania region ablaze.⁴⁰ The goal of explaining the natural causes of a cataclysmic eruption points to those elements in the didactic poem where nature will be portrayed according to what Opitz perceived as its natural laws, or, again, nature qua nature. However, immediately following a further dedicatory passage in the form of Latin verse, Opitz opens the actual preface to the poem with Latin verse that treats the eruption as an episode replete with divine warnings and portents, and thus infused the natural event of Vesuvius's eruption with allegorical signification.⁴¹ Thus, very early in the poem, in the dedicatory material and accompanying Latin poetry, Opitz signals two seemingly contradictory impulses in *Vesuvius*: the desire to portray objectively, in scientific discourse, a natural phenomenon brought about by natural causes, and a signal to society at large that a divinely ordained event has taken place which should be regarded as a portent for Judgment Day. As Ralph Häfner has eloquently put it, *Vesuvius* is a scientific poem (“*wissenschaftliche Dichtung*”) that seeks to elucidate a natural phenomenon, but at the same time instrumentalizes this phenomenon as an expression of God's will, an act of revelation.

In order to explicate the “nature of things” or, as I am calling it, nature qua nature, Opitz resorts to objective descriptions of the phenomena brought about by the volcanic eruption as well as the employment of idealized nature imitation. However, he does so for the purpose of revealing to society the hidden intention of God in his bringing about the event. As Häfner indicates, Opitz has to resort to allegory in order to bring divine intent to poetic expression and, concomitantly, to reveal God's ethical plan.⁴²

Häfner indicates that *Vesuvius*, in its double and seemingly self-contradictory intentions, makes Opitz exemplary as a poet/scholar for the early modern period.

40 Opitz, “Vesvvivs: Poema Germanicum,” *Gesammelte Werke* 5, ed. Gudrun Bamberger and Jörg Robert. Bibliothek des literarischen Vereins in Stuttgart, 355 (Stuttgart: Anton Hiersemann, 2021), 223–303; here 248. My emphasis in the translation.

41 Opitz, “Vesvvivs” (see note 40), 251.

42 Ralph Häfner, “*Naturae perdiscere mores. Naturrecht und Naturgesetz in Martin Opitz' wissenschaftlichem Gedicht 'Vesuvius,'*” *Zeitschrift für Germanistik* 19.1 (2009): 41–50; here 43–44.

Certainly, the early modern period, specifically the Baroque age on the cusp of the Enlightenment when Opitz was active as a writer, was a transitional epoch during which the attempt to achieve scientific objectivity in dealing with, and representing, the natural world, alternated with a view that saw the natural world as controlled by God, and thus fixed, ordered, and stable. If natural phenomena such as volcanic eruptions were indeed governed by immanent forces, then nature poetry must be informed by what Anna Carrdus calls “the interdependence of *ars* and *natura*,” a position she persuasively argues was taken by Opitz.⁴³ Indeed, as Carrdus notes in citing the *Poeterey*, “Opitz reminds his readers of art’s proximity to nature.”⁴⁴ This results in the artistic attempt to reflect nature’s essential properties through an *imitatio* grounded in the prosodic possibilities of the German language, as we have seen in our discussion of the *Poeterey*.

On the other hand, if nature is steered by a divine controlling hand, and thus subject to godly volition, then a figural approach is called for whereby natural events can be seen to reveal this volition through allegory. Such figuration presumes the hand of God controls the universe and sees its objects as lacking historical flux. In this perspective, such objects dwell essentially outside the realm of temporal forces that are, in the perspective of the Enlightenment, not subject to the control of omnipotent divine will.

We have seen that both these tendencies are evident in the paratexts of *Vesuvius*, reflecting Opitz’s position as a threshold figure between a Baroque theology that sought to discern God’s apparently unchanging order and an Enlightenment period that began to recognize the volatile, temporal character of nature. Indeed, these dual, seemingly somewhat self-contradictory approaches to representing nature are also manifest in the relatively brief portion of this didactic poem constituted by the verse itself. For example, the destruction of natural life caused by the pestilence triggered by the volcanic eruption is represented as an act of divine punishment:

Wo jetzt noch der gestanck des Asphatltites wehrt /
Den wildt vnd vogel fleucht / den keine lufft beweget /
Der selber weder fisch/ noch frucht am vfer treget /
Vndt nur das pech gebiehrt / auß welchem man erkiest
Wie Gott das Laster strafft das nicht zue sagen ist.⁴⁵

⁴³ Anna Carrdus, *Classical Rhetoric and the German Poet 1620 to the Present: A Study of Opitz, Bürger and Eichendorff* (Oxford: Legenda, 1996), 2. See also the contribution to this volume by Reinhold Münster.

⁴⁴ Carrdus, *Classical Rhetoric and the German Poet* (see note 43), 28.

⁴⁵ Opitz, “Vesvviu” (see note 40), 274.

[Where now the stench of asphaltite blows /
 Fled by wild animals and birds/ that no air moves /
 That itself neither fish nor fruit on the riverbank supports /
 And only births misfortune/ from which one perceives
 How God punishes vice that is verily unsayable.]

If God's wrath is represented here as an external force designed to punish humanity for its vice by wreaking pestilence on the natural habitat on and around Vesuvius, so that this blight is allegorically represented as the sign of divine rage, a few short verses later, Opitz offers a long discourse on the geological circumstances that brought about the catastrophe. This passage begins as follows:

Doch kömpt was anders noch der warheit näher bey.
 Das erdtreich / also weit sein großer vmbschweiff reichet
 Jst löcherig vndt hol / weil es jhm selbst nicht gleichet /
 Vndt wegen vieler art in welcher es besteht /
 Sich von einander trennt / vndt nie zuesammen geht;⁴⁶

[But something else comes closer to the truth.
 The earthly realm / so far its great expanse reaches
 Is full of holes and hollow/ because it doesn't resemble itself /
 And because of many ways in which it consists /
 Separates from each other / and never goes together.]

From this angle, Opitz's verse attributes the natural catastrophe of the Vesuvius eruption to the mountain's geologic instability. Here we also have idealized nature in the sense that what is normally hidden from human view is exposed, and thus reveals the danger with which we are constantly beset. Indeed, as Häfner indicates, *Vesuvius* is at one and the same time a scientific poem and also takes a position consistent with the eschatology Opitz adumbrated in his preface to Hugo Grotius's *Von der Warheit der Christlichen Religion* (1631), a Dutch-language work Opitz himself translated. In this preface, Opitz looked to nature for the divine signs that would signal God's plan of salvation, such as comets, locusts, floods, and earthquakes. Thus Opitz, as Häfner notes, understood the eruption of Vesuvius as an act of divine revelation, an eschatological sign.⁴⁷

In *Vesuvius*, Opitz does not seem to be aware of any discrepancy between displaying his knowledge of how the phenomena he describes as resulting from the eruption are rooted in nature qua nature and creating a portrayal of the physical

⁴⁶ Opitz, "Vesvvivs" (see note 40), 279–80.

⁴⁷ Häfner, "Naturae perdiscere mores (see note 42)," 43–44. See also Classen, "Medieval Epistemology" in the current volume (see note 4), which discusses how the epistemological function of nature was perceived in the medieval period.

consequences of the eruption in an allegorical manner. Thus, after mentioning such occurrences as the corpse of a horse hatching a black beetle, the carrion of a meaty ox filling a meadow with bees, and a natural spring exhibiting sudden alternations between water gushing forth and being arid and dry, all clearly allegorical/eschatological ciphers, he also proclaims: “Diß alles ist Natur”⁴⁸ (This is all nature). One could also argue in the broadest sense that, while allegorization and the idealized imitation of nature seem conflicted approaches to poetic composition, there is an underlying consistency to these two ways of representing nature on the part of Opitz. For regardless of whether the poet imitates nature to evoke its essence by revealing it to be not simply as it appears but as it could or should be perceived, even by exaggerating its labile quality and the vastness of its expanse as he does above, or allegorizes phenomena for eschatological purposes, he is illustrating that nature is imbued with the divine. Nature reveals this divine plan through the poetic guidance offered by Opitz, who hopes that society, by means of this guidance, can recognize it.

Whether nature exhibits divinely tinged beauty and awesome, albeit sometimes destructive, majesty or portents of the Last Judgment, the poet, in both instances, presents it to the reader as the creation of God and an idealization of nature takes place because it is treated as a work of God and perfect in its own right. Toward the conclusion of *Vesuvius*, Opitz tends toward the eschatological. Its closing passages reference the depredations of the Thirty Years’ War, as the poet prays to God for deliverance but regards the calamities of Vesuvius as miraculous signs (“wunderzeichen”) through which heaven is raging at us (“schreyt vns zue”) and nature threatens us with an abominable shape (“Mitt scheußlicher gestalt”).⁴⁹

The Sublime in *Vesuvius*: Anticipating Burke and Kant and Following the Lead of Seneca

Nevertheless, there are also moments of sublimity in *Vesuvius*. As Becker-Cantarino notes in summarizing the introduction to the main portion of the poem, this section evokes the essence of the human in nature. The human recognizes the perfection of nature and himself as its most noble creation only when he places himself outside of quotidian striving and looks down from the stars, thus gazing at earth from

⁴⁸ Opitz, “Vesvviu” (see note 40), 293–94.

⁴⁹ Opitz, “Vesvviu” (see note 40), 301.

a perspective of eternity. Again, nature is idealized in the sense that natural aspects are revealed that are normally hidden from view, because humanity does not live among the stars. Unlike the relatively scientific description of the planet's instability in the geological passage focused on the constitution of the earth on Mount Vesuvius, here nature's hidden quality is related to its infinite external terrestrial expanse normally occluded from human view, not its inner makeup within the earth, although this latter region is also largely invisible to the mortal eye. In the view from the stars the human individual stands outside the temporal, and the vanity or nullity ("Nichtigkeit") of human activity becomes evident.⁵⁰

This is a moment of sublimation in the poem, whereby the spectator gains a God's-eye view of creation. In the Kantian articulation of the sublime, such detachment is necessary in the articulation of this emotion, and results as well from a reflective moment enabled by deep solitude. Although Kant associates such deep solitude with terror, the experience of the starry sky in the expanse of evening creates the kind of silent admiration or a sense of beauty that Kant associates with the noble and the magnificent sublime.⁵¹

Becker-Cantarino notes the God's-eye view evoked in *Vesuvius*, the glimpse from the stars that makes quotidian earthly existence seem petty and ridiculous, was inspired by Seneca. In Seneca's rendering quoted by Becker-Cantarino, an individual who observed from above the battle for territory among the nations, and gleaned insight into human limitations in general, will see such human concerns as laughable and even ridiculous. As Becker-Cantarino further comments, the narrative perspective in this passage from *Vesuvius* becomes concretized as the heart laughs from the stars at the building of human dwellings.⁵² According to Burke, it is obscurity evoked by such circumstances as great distance that helps create a sublime sensibility,⁵³ and the national borders observed by the bird's-eye view in Seneca as well as the gaze from the stars in Opitz, afford in such moments a brief premonition of the sublime. However, in the same passage from *Vesuvius* cited by Becker-Cantarino, Opitz quickly abandons this elevated moment to evoke the horrors of the Thirty Years' War.⁵⁴ Precisely the jarring juxtaposition of side-real splendor with squalid and petty strife, the grace and divine beauty of nature contrasted with the destruction wrought by human conflict, indeed the majesty of

⁵⁰ Becker-Cantarino, "Vesuvius" (see note 39), 504.

⁵¹ Immanuel Kant, "From *Observations on the Feeling of the Beautiful and Sublime* (1764)," *The Sublime Reader* (see note 8), 105–13; here 106.

⁵² Becker-Cantarino, "Vesuvius" (see note 39), 509.

⁵³ Edmund Burke, "From *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, (1759)" *The Sublime Reader* (see note 8), 78–90; here 81–83.

⁵⁴ Opitz, cited in Becker-Cantarino, "Vesuvius" (see note 39), 509.

nature with its latent power to annihilate human existence (in this sense, rendering the volcano as an allegorical cipher for the ruin wrought by the Thirty Years' War) make *Vesuvius* a quintessentially Baroque work. The poem's alternation between scientific explanation and religious exhortation, the sometimes-idealized imitation of nature and its allegorization creates a somewhat conflicted message for society that is, on the other hand, rather uniquely the contribution of this father of German poetry.

Conclusion

Perhaps the most significant work in the current age to articulate the contrast between poetry grounded in the poetic imitation of nature and poetry written with an allegorical orientation is Zhang Longxi's *Allegoresis: Reading Canonical Literature East and West* (2005). Most of the influential critical discussions of allegory in the recent past have focused on the dichotomy between allegory and symbol, which are both rooted in the figurative,⁵⁵ but *Allegoresis* contrasts allegoric writing with non-figurative, concrete poetry oriented toward the imitation of nature. Due to the pictographic character of the Chinese alphabet and the perception by the West that Chinese philosophy is based on a belief in inherent natural harmony grounded in nature's own immanent laws rather than governed by a God external to a divinely created environment, most Western scholars treat Chinese poetry and poetics as rooted in an unmediated relationship between nature and writing, signifier and signified. In consequence, according to Longxi, such scholars have traditionally read Chinese poetry as generated by the imitation of nature and not informed by allegorical figuration.

Refuting this view, Longxi seeks to show that allegory and allegoresis are as fundamentally a formative aspect of Chinese literature from its beginnings to the

55 The two most influential scholars in the twentieth century to elucidate the dichotomy between symbol and allegory in poetic figuration were Walter Benjamin and Paul de Man. For a lucid exploration of their contrasting but often surprisingly similar views on this subject, see Andrea Mirabile, "Allegory, Pathos, and Irony: The Resistance to Benjamin in Paul de Man," *German Studies Review* 35.2 (2012): 319–33. While the present essay distinguishes between allegory as figurative language and the poetic imitation of nature in Opitz, I have discussed Benjamin's distinction between allegory and symbol in his writing on the Baroque in a previous work. See John Pizer, "Dream and Prophetic Projection in Andreas Gryphius's Historical Tragedies: Traces of the Symbol," *Imagination and Fantasy in the Middle Ages and Early Modern Time: Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 24 (Berlin and Boston: Walter de Gruyter, 2020), 711–35.

mid-twentieth century Maoist Cultural Revolution and beyond as they are in the West. While this is the primary thesis of *Allegoresis*, Longxi also traces the rise of the allegorical tradition in the West and its often contestatory engagement with the mimetic tradition. He shows that while figures such as St. Augustine and the early Protestants argued the Bible can be interpreted in a literal sense, as it is seen to be invested with a clear, even limpid coherence, others assumed there was always a hidden meaning in this work pointing to divine guidance. Such thinkers believed that the fundamental semiotic essence of this holy work, and indeed of the natural world can only be gleaned through a process of allegoresis. Longxi's discussion allows us to situate historically these competing tendencies in Opitz, even though he does not mention this early modern poet and scholar. Longxi adumbrates the exaggerated embrace of allegoresis in the early days of the Church, when figures such as the second century ascetic Origen regarded the Old Testament in its entirety as in need of allegoresis in order to bring forth its authentic prefiguration of Christianity.

Origen regarded the Bible in its entirety as semiotically spiritual and dismissed its materiality and sensuality, finding these elements superficial and insensational.⁵⁶ In the thirteenth century, under the influence of Thomas Aquinas, theologians started to emphasize the need to focus on the literal sense of the Bible. This trend culminated in early Protestant theology, leading to a refutation of allegorically grounded readings of the Bible. As Longxi puts it: "For Luther, Calvin, and the other reformers, allegorization was of little use in dogmatic theology. Like Aquinas, Luther also sees the Bible as self-explanatory."⁵⁷

Ultimately, this refutation of allegoresis led to the emergence of Protestant poetics such as those of Opitz and, later, Gottsched, where nature can be celebrated and imitated in an approach based on the immanent beauty, power, and indeed sublimity of the natural world, so that nature is no longer just read for signs of divine rule. However, Opitz lived in a transitional period between the all-encompassing focus on God and a science-oriented secularism that became dominant in the eighteenth century. Living between these two periods and facing the overwhelming horrors of the Thirty Years' War when Opitz was writing understandably inclined him and other Baroque writers to look to nature for signs of God's will and the causes of his unrelenting wrath. Thus, the tension between imitation and allegory in Opitz's poetic theory and practice is readily comprehensible given the age in which he lived.

56 Zhang Longxi, *Allegoresis: Reading Canonical Literature East and West* (Ithaca, NY, and London: Cornell University Press, 2005), 79–84.

57 Longxi, *Allegoresis* (see note 56), 121.

Pascale Barthe

François Bernier and Nature in Kashmir: Belonging in Paradise?

Abstract: This close reading of François Bernier's Kashmir letters focuses on the description and allegoric significance of the legendary Himalayan valley. Traveling with Aurangzeb and his court in the 1660s, Bernier describes the natural environment that leads to and defines Kashmir. The valley, however, was not only known for its cool temperatures and unparalleled beauty; it was also intrinsically imbued with religious and political meaning for the Mughals, and by extension for the French traveler. This study shows that Bernier was aware of the entanglement of nature, religion, polity, and empire in Kashmir. It demonstrates that the nature Bernier encountered and about which he was writing influenced his understanding of Mughal culture and allowed him to leave his own imprints on Kashmir.

Keywords: François Bernier, Kashmir, Mughal India, paradise, water, garden, pastoral poetry

Introduction

Shortly after his accession to the throne, Aurangzeb (1618–1707) decided to take his court out of Delhi and spend several months in Kashmir, some three hundred and fifty miles north-east of the imperial city.¹ The journey gave others, too, the opportunity to discover and to live in the Himalayan valley for a few months. Daneshmend Khan, Aurangzeb's Secretary of Foreign Affairs at the time, was among the traveling party, and so was a Frenchman. François Bernier (1620–1688) had first found employment as a medical doctor in early 1659 at the court of Dara Shikoh, Aurangzeb's brother. Following the demise and killing of his protector and ill-fated heir-to-be, Bernier joined Daneshmend Khan's circle, and it is alongside his new patron that the Frenchman set foot in the direction of Kashmir.² Although

¹ This study is dedicated to Reem Hakeem, daughter of Kashmir and Palestine.

² Dates of Aurangzeb's travel to Kashmir vary according to the sources. Niccolo Manucci indicates 1660, whereas Bernier claims 1664. Mughal sources purport that the trip started in December 1662

familiar with the Mughal court, nothing could have prepared Bernier for either the grueling travel across India or the enchanted Kashmiri valley itself. He describes the many challenges he encountered along the way, the surprises that punctuated the journey, and the observations he made about nature and the Mughal polity in nine letters he penned and addressed to François Boysson, seigneur de Merveilles. The letters and other works were published in 1671 in the second volume of his *Suite des Mémoires de Sieur Bernier sur l'empire du Grand Mogol* and found a receptive audience that reached far past Parisian *curieux* and salon goers.³

In his Kashmir letters, Bernier describes the steps of the expedition as well as the valley itself – its mesmerizing natural beauty; its folklore and traditions, including several examples of what local lore considered miraculous wonders. The correspondence follows the Mughal emperor's entourage both spatially and chronologically and contains a fair number of ethnographic elements. The first letter is dated December 14, 1664; it was written in Delhi. The second letter was penned in Lahore on February 25, 1665. The following pieces of correspondence are not dated but indicate the court's spatial progression: after reaching Lahore from Delhi, the travelers arrived in Bhimbar and finally entered the valley of Kashmir. The expedition lasted a full six months of exhausting and physically challenging travel before the convoy reached paradisiac Kashmir in May or June. According to Bernier who took this opportunity to visit several attractions during his stay, the Mughal court spent a little over two months in the cool climes of the Himalayas and was back in Delhi in January of the following year.

Bernier may not have been the first European to go to Kashmir, but he was the first to relate his trip and his stay in the valley in detail. An eyewitness account, his letters resemble a travel narrative and are, on the surface at least, less politically charged than his other published writings. A striking feature in all of Bernier's letters on Kashmir is his insistent remarks on the natural world. In Bernier's text, Kashmir is, first and foremost, a unique natural environment in which the Frenchman revels. Mountains, greenery, and life-sustaining rivers populate

following the Mughal emperor's long illness. Saqī Mustā'ad Khan, *Maāsir-i- 'Alamgiri: A History of the Emperor Aurangzib-Alamgir (Reign 1658–1707 A.D.)*, trans. Sir Jadu-Nath Sarkar (Calcutta: Royal Asiatic Society of Bengal: 1947), 25–26. <https://archive.org/details/learnislampdfenglishbookmaasirialamgiri/historyofemperoraurangzebalamgir/page/n33/mode/2up> (last accessed on Feb. 6, 2024).

³ On the reception of Bernier's Indian correspondence and reflections, see Faith E. Beasley, *Versailles Meets the Taj Mahal: François Bernier, Marguerite de La Sablière, and Enlightening Conversations in Seventeenth-Century France* (Toronto: University of Toronto Press, 2018). Bernier's works were swiftly translated into English, Dutch, German, and Italian (Beasley, *Versailles Meets the Taj Mahal*, 14–15).

his correspondence. Both during the travel and while in Kashmir, nature was an inescapable backdrop, whether in its majesty or its harshness. Likewise, for the *taleteller*, Kashmir's nature is both the frame and the thread of the narrative.

In this study, I examine Bernier's descriptions of the natural environment he encountered on his way to Kashmir and in the valley itself. I emphasize the textual descriptions of the traveler's surroundings and unveil their religious and political undertones, which allows me to suggest that the spectacular beauty and, at the same time, the harshness of the trip to Kashmir compelled Bernier to face the profound ambivalences he felt about Mughal courtly society, as well as about himself. A traveler in Asia closely associated with the Mughal court, Bernier remained an outsider who corresponded with his patrons in France while being embedded in, and profoundly dependent on the Mughal court – in Kashmir in particular since reaching the valley demanded a specifically well organized and executed plan he and others had no choice but to follow.

Physically in Kashmir and far from France, where did Bernier situate himself, intellectually, during this travel? Unable to escape the daily struggles of his voyage, the thinker noticed not only his physical environment, but also striking elements of the Mughal culture and polity closely associated with Kashmir's extraordinary setting. Bernier, for example, was confronted by deeply rooted religious beliefs that he sometimes questioned, and at other times seemed to accept without much opposition. Focusing on water and gardens, I show that nature in Kashmir complicates, but also enhances Bernier's reflection on Mughal society. It allows him to question European and Indian traditions as well as his own sense of belonging. In short, nature provides Bernier with opportunities for cultural conversations and momentary conversions.

To Kashmir: Nature Domesticated?

Bernier devotes several letters to the weeks-long march that preceded the arrival in the Himalayan valley. This preamble to Kashmir is important as it sets the tone for the tensions that Bernier will experience and incorporate in forms of reflections in his longer, later letters that unveil the intricateness of nature and cultural politics in the valley. The number of people involved in the walk to Kashmir under Aurangzeb's lead was staggering for the French observer who states that it was the entire city of Delhi that was on the move.

c'est une quantité de monde prodigieuse et quasi incroyable, mais aussi il faut s'imaginer que c'est tout Delhi, la capitale, qui marche, parce que tout le monde de la ville, ne vivant

enfin que de la cour et de l'armée, comme j'ai dit ailleurs, il est obligé de suivre quand principalement le voyage doit être long comme celui-ci, ou bien il faudrait qu'il mourût de faim.⁴

[the multitude is prodigious and almost incredible. The whole population of Delhi, the capital city, is in fact collected in the camp, because deriving its employment and maintenance from the court and army, it has no alternative but to follow them in their march or to perish from want during their absence.⁵]

In addition to observing the sheer size of the column, Bernier points out that the displacement was not chosen by the court, but rather imposed by the Mughal ruler on whom each member of the traveling party was entirely dependent. This political commentary echoes passages from Bernier's letter to Colbert on the decadence of "Hindoustan," the principal cause of which, according to him, was the lack of private property.⁶ Since the ruler possesses everything and the *omrahs* and *manseb-dars* (members of the court) nothing except for a few houses and gardens, the latter have no option but to obey unconditionally. Thus, if Aurangzeb decided to go to Kashmir, the entire city followed since staying behind would have meant risking to die from hunger. As Joan-Pau Rubiés has shown, Bernier's description of the Mughal polity is geared toward his French audience,⁷ but what I want to emphasize in this first quote is the equation of Delhi, the new imperial capital with the prospect of death as soon as the court departs. From splendor to shambles, Mughal India is trepidatious, but above all extremely dangerous, according to Bernier. Encompassing vast and generally desolate territories like the ones encountered around Lahore that contrast with France's numerous villages and cultivated fields,⁸ India owed its grandeur only to the court's presence and

4 All references to Bernier's text are taken from *Un libertin dans l'Inde moghole: Les voyages de François Bernier (1656–1669)*, ed. Frédéric Tinguely (Paris: Chandeigne, 2008), 394.

5 Translations come from François Bernier, *Travels in the Mogul Empire*, trans. Archibald Constable revised by Vincent A. Smith (1891; London: Oxford University Press, 1916), 381.

6 "Lettre à Monseigneur Colbert, de l'étendue de l'Hindoustan, circulation de l'or et de l'argent pour venir s'y abîmer, richesses, forces, justice, et cause principale de la décadence des états d'Asie" is a detailed exposé on Mughal India's state of affairs in the 1670s according to Bernier. See *Un libertin dans l'Inde moghole* (see note 4), 197–232. For a discussion on Asian and French tyranny, see Joan-Pau Rubiés, "Race, Climate and Civilization in the Works of François Bernier," *L'Inde des Lumières: Discours, histoire et savoir (XVII^e–XIX^e siècle)*, ed. Martine Fourcade and Ines G. Županov (Paris: Éditions des hautes études en sciences sociales, 2013), 53–78.

7 Rubiés, "Race, Climate and Civilization in the Works of François Bernier" (see note 6).

8 In his letter to Colbert, Bernier praises European monarchs who allow princes, prelates, artisans, merchants, and bourgeois to develop cities like Paris, Lyon, Toulouse, and Rouen, as well as the countryside where one finds "une infinité de bourgades et de villages, toutes ces belles maisons des champs et toutes ces campagnes et collines cultivées et entretenues avec tant d'industrie, de soin et de travail" (227) [Where should we see that infinite number of towns and villages;

magnificence which Bernier stresses on numerous occasions throughout his writings. Kashmir, with its eternal green, fertile land, and cultural splendor appears to be a notable exception in the barren Indian landscape that the Mughal court temporarily “civilizes” and “aggrandizes.”

On the road to Kashmir, then, scores of men, women, and animals carried with them enough food, water, utensils, tents, and arms to sustain a long and grueling trip. A migration of such magnitude demanded a flawless organization which Bernier describes as exemplary, but before delving into the logistical configuration of the court’s displacement, it is important to note the presence of numerous animals among Aurangzeb’s wandering court, as well as in Bernier’s narrative to Kashmir. Aurangzeb, it turns out, traveled not only with his entourage of high- and low-ranking officers and their large retinues, but also with his entire menagerie. In the caravan, there were more animals than horsemen, states Bernier. Some – leopards for example – were meant to show the emperor’s grandeur and were used in arranged hunts that punctuated the march. Others, like the tamed gazelles that fight, were brought along to distract the court during its extensive travel (379). Other animals yet served a more utilitarian purpose: more than sixty elephants, two hundred camels, and one hundred donkeys complemented the hundred or so carriers who hauled the necessary equipment such as tents and cooking utensils.

Lodging and feeding the moving court were a necessity, of course, but it is hunting, the Mughal emperor’s favorite pastime, that Bernier chooses to emphasize in his correspondence. Hunting, states the French traveler, was practiced out in “terres incultes, les unes comme des bois taillis et les autres pleines de grandes herbes de la hauteur d’un homme et davantage” (389) – “uncultivated land, covered either with copse wood or with grasses six feet high” – near Agra and Delhi along the Yamuna River up until the mountains and on both sides of the road to Lahore. Like European royals, Mughals were avid hunters and they had developed various hunting techniques based on the animal they wanted to catch – gazelle, nilgai, crane, or lion. Various types of hunts are depicted in Mughal miniatures with which Bernier’s passages strongly resonate.⁹ In both visual and literary

all those beautiful country houses, those fine plains, hills and valleys, cultivated with such care, art and labour?]] (223). This literary description of France’s populated and developed landscape contrasts sharply with the bare map of “L’empire du Grand Mogol” included in the 1710 Amsterdam edition of Bernier’s works.

⁹ Examples of such illustrations include “Akbar Hunting” and “Akbar Hunting with Cheetas”. These works, currently at the Victoria and Albert Museum in London, date from the late sixteenth-century and stem from an *Akbarnama* (Book of Akbar or, History of Akbar) reproduced in a recent, modern edition of Bernier’s Kashmir letters aimed at a wider audience. See *Voyage au*

renditions, then, India's desolate landscape is populated, if only temporarily, by the court and stocked with wild game. Animals were deeply enmeshed in the Mughal court where they were put at the service of men, either used as beast of burden, prey, or hunting companions or hunting prey, thereby accentuating the symbolical power of the Mughals.

Bernier observes that, as animals and men moved side by side, two groups traveled, one slightly ahead of the other. As one group went slightly ahead of the other, the camp could be set up before the court itself arrived. By the time the second group had joined the first, everything was in place for the travelers to rest, cook, entertain, or be entertained. The camp was set up in the most orderly manner, symmetrically, the red tent of the ruler visible from afar and surrounded by a series of other tents disposed in a specific arrangement that allowed for orderly visits and processions that closely followed protocol. Ruling did not stop while the court journeyed between imperial posts, and Aurangzeb would receive requests and consider grievances on the road, as he did in Delhi. Commerce, too, continued unabatedly, the bazaar being an integral and lively part of the encampment. Furthermore, music was played, food shared, and distractions provided. In other words, courtly life went on as usual with its peculiar rules and regulations regardless of the location of the ruler. The court might transplant itself to a different camp site every day and hence appear fleeting and ephemeral, but the regularity and the repetition of the move, the daily recreation of a capital city in a countryside that Bernier describes as barren and unbuilt, had to be quite extraordinary to watch. The setting up and taking down of the court camp offered a routine, a precision, and a timelessness that must have procured a feeling of both safety – in its predictability – and grandeur. In short, even in its displacement, the Mughal court was magnificent as illustrated in contemporaneous Mughal miniatures that depict both large number of travelers and the scripted ceremonial with which they moved.¹⁰

Behind this magnificence, however, trouble was never far away. Although precautions were taken against them, thieves were not unheard of. The construction

Cachemire de François Bernier, ed. Amina Taha Hussein-Okada and Isabelle Pasquet (Paris: Carnets des tropiques, 2009), 27 and 23, 44, and 45 respectively. Hunting techniques and animals did not change with Akbar's descendants as demonstrated by another miniature, contemporary to Bernier's letters, depicting Aurangzeb hunting lions (*Voyage au Cachemire de François Bernier*, 48, 49, and 50).

10 Bernier speaks of the "pompe et magnificence de la cour" and of the "pompeuse marche du sérail" (373, 386). Two miniatures of *Kitab-i Mathnawiyyat-i Zafar Khan*, reproduced in Sunil Sharma's *Mughal Arcadia*, illustrate the court's pomp. See Sunil Sharma, *Mughal Arcadia: Persian Literature in an Indian Court* (Cambridge, MA, and London: Harvard University Press, 2017), figure 6, 146–47.

of the city camp, therefore, could not entirely prevent highwaymen from stealing and disrupting the well-oiled workings of Mughal life. Likewise, even if the court's encampment was constructed according to precise and never-changing methods and goals, thereby ensuring ease of movement and orientation, one could nevertheless get accidentally lost. On a foggy night, Bernier experienced such a disorientation. In a comical passage that was indubitably composed long after the event and the trauma, he describes his nerve-racking misadventure, one that recalls Montesquieu's humorous description of a topsy-turvy Ricca in Paris.¹¹ Although Bernier traveled with the Mughal court under the personal protection of Daneshmend Khan, he remained constrained by the Mughal milieu, always a foreigner at the mercy of local customs and climatic events.

In addition to lurking thieves and potential disorientation in the encampment maze, the traveling conditions in and of themselves were overwhelmingly difficult for Bernier and for all the other travelers. The departure time, always set for spring, was dependent upon very specific climatic restrictions that included waiting for the Kashmiri snow to melt and avoiding excessive rains that might cause flooding in the Lahore area. Once it was determined that no more snow and rain would fall and imperil the travelers, another danger awaited, much less avoidable than floods: heat. Between Lahore and Bhimbar, the heat was insufferable according to Bernier, who searched for an explanation. He surmised that the mountains that separated them from Kashmir must have been so high that the winds were stopped, and the reflection of the sun intensified, thereby adding to the degree of the outside temperatures. After crossing the Chenab River, Bernier was forced to acknowledge that the heat increased further still. Crushed as he was by the heat of the sun, he would have been tempted to associate this river with the Styx, the mythological river of the Underworld, had it not been for the fact that the quality of its waters was renowned among the Mughals, an assertion that mitigated Bernier's impression. Overall though, the French traveler is of the opinion that facing such intolerable heat and the dangerous trails that come with it is tantamount to folly, especially for a European whose life would necessarily be at risk during this trip (399).

The seventh of Bernier's letters is the shortest of all and the most alarmist. The group had left Lahore ten days prior and that day, as soon as the sun rose, the heat became unbearable. Nothing could attenuate its intensity: no cloud in sight, no wind, not a semblance of green grass for the horses. Bernier's Indian servants gave in and one of the cavaliers was found dead. The French traveler's own body bore the brunt of the sun and was transformed: his face, hands, and

11 Montesquieu, *Lettres persanes*, 2 vols. (Amsterdam: Pierre Brunel, 1721).

feet were peeled; his entire figure was covered in red prickly blisters. Shriveled and dehydrated, Bernier's skin mirrored the ink of his dried-up quill. Too weak to hold his feather, he, too, will undoubtedly fall, he surmises in his letter which he ends with a noticeably desperate "adieu."

In his letters describing the Mughal court as it headed to Kashmir, Bernier focuses on the massive number of travelers, the organization necessary for so many people and animals moving from one place to another, the pomp of the peripatetic court that included royal hunting, and the difficulties encountered during the travel. Logistics regarding the travel were addressed as efficiently as possible, but the men faced a hurdle much harder to overcome – excruciating summer heat.

After surviving it, the final test for the traveling party before entering the emerald valley entailed passing through a series of mountains arranged like onion skins (406). It is then that the heat and the barren lands in which the hunt took place near Lahore disappeared as the caravan left Punjab and reached higher altitudes. The traveling court now crossed mountains so vertiginously high that the wind stopped blowing and that rocks overtook any kind of vegetation. The landscape, overwhelmingly mineral, was only now and then peppered by ice and snow. From Lahore, the high mountain range was overpowering and appeared insurmountable, but beyond awaited the most stunning of all gardens, a *locus amoenus*. Protected by the Himalayas and seemingly inaccessible, Kashmir was a permanently exquisite spectacle of nature populated by domesticated animals, skilled men, and beautiful women.¹² Appearing in all its glory, the valley of Kashmir was dotted by rolling hills and interspersed with lakes and canals. It glew of greens and exuded fertility. Bernier had entered *pardis*. A Persian word denoting a beautiful, enclosed garden, *pardis* is used by Bernier in its derived French form, *paradis*, to describe Kashmir and its heavenly nature: our traveler had entered "le paradis terrestre des Indes." Unable to imagine anything more beautiful in the world, he confessed being spell-bound, "charmé de Cachemire (410)."

Bernier endured the heat of Punjab as well as the harsh climatic and climbing conditions as rigorously as others. Contrary to many, however, he managed to survive. His ruse and his chameleonic skills might explain why. In his first letter, he stresses the difficult conditions of the travel and recommends dealing with it by "se faire arabe", by which he means to go native (372–73). In other words: in

¹² On the correspondence between climate and physiognomy (and race) in Bernier, see Rubiés, "Race, Climate and Civilization in the Works of François Bernier," (see note 6). See also Supriya Gandhi, "Locating Race in Mughal India," *Renaissance Quarterly* 75 (2022): 1180–220. Gandhi adds to the discussions about race in Bernier's works by examining early modern Indian literary productions.

India, do as the Indians. In addition to following the orders of the ruler and the movement and rhythm of the court, this implied taking certain precautions and procuring the right equipment. A Kashmiri tent was not only useful for its lightness, according to Bernier, but it also enabled the European traveler to blend in and hence to avoid higher-than-necessary costs. Perhaps more important than Bernier's Indian stratagems, however, water played a crucial role in the travel. The Mughal court's well-oiled imperial machinery would have amounted to nothing had it not been for this single, ever-precious natural element.

***Pardis*, Garden of Eden**

In India or elsewhere, in the seventeenth century or now – whether someone is traveling or living a more sedentary life than the Mughals were – water is necessary for survival. In Bernier's letters, water is a natural element with divine qualities that obsessively returns and punctuates the narrative. Whether it takes the form of providential rains or of a fresh and non-polluted river, water equates life. Serving as a guide for future travelers, Bernier points out regions where water was not suited for consumption, and locations where, on the contrary, it tasted sweet and fresh and was drinkable. Whereas some water might cause disease and maybe death, other maintained and fostered good health.¹³ Likewise, an unexpected storm cured weakness and frailty by opening one's appetite and regenerating forces and prolixity. Furthermore, some Indian waters were said to have medicinal value, an assertion that Bernier, who received his medical degree from Montpellier, did not seek to evaluate, but instead accepted at face value (430).

Precious as it was, water had therefore to be preserved, controlled, and even managed. Streams, canals, lakes, fountains, and cascades abounded in Kashmir and in Bernier's letters. Some water-retaining constructions were natural, but many were man-made. Akbar's son, Jahangir, for example, laid out waterfalls (415).¹⁴ Early modern Mughal miniatures, especially those portraying scenes set in Kashmir, showcase bodies of water. In one of these visual representations, water

¹³ For a discussion on the relation between human health and the environment, in a medieval German context, see Chiara Benati's and Filip Hrbek's contributions in this volume.

¹⁴ Jahangir's construction anticipates much more recent and expansive projects. For a thorough discussion on modern water management in South-East Asia, see David Gilmartin, *Blood and Water: The Indus River Basin in Modern History* (Berkeley, CA: University of California Press, 2015). For an examination of water as a crucial topic also in pre-modern literature, see Albrecht Classen, *Water in Medieval Literature: An Ecocritical Reading*. *Ecocritical Theory and Practice* (Lanham, MD, Boulder, CO, et al.: Lexington Books, 2018).

serves as a dynamic backdrop for a courtly life display, linking Shah Jahan, who is sitting on a floral recliner and examining jewels at the center of the illumination, and the city of Srinagar in the background.¹⁵ In another depicting Jahangir on a lake, it invades the miniature and forms its main element.¹⁶ In others yet, water connects, physically or spiritually, several planes of a miniature as in the one representing Zafar Khan, poet and governor of Kashmir, surrounded by streams, canals, and basins¹⁷ or the one framing a meeting of Sufis and suggesting the possibility of both terrestrial and spiritual elevation.¹⁸ In addition to being a source of life because of its freshness, its purity, and the fish it hosts which sustain men, water is imbued with miraculous properties in both Mughal miniatures and Bernier's writings.

Water in Kashmir is intrinsically linked with gardens. According to Bernier, each house in Srinagar was flanked by a garden that opened up to water (408). The capital of the valley was characterized by a large lake on which a plethora of islands formed just as many gardens. Not only does Bernier describe this specificity in his writings, but the map of Kashmir included in the 1701 Amsterdam edition of his works visually shows the high mountain ranges that protected the valley and depicts Srinagar's main lake and its many islands. Further away in Achibal, a fountain cum garden provided a beautiful sight, but the most impressive of all Kashmiri gardens was perhaps Shalimar with its canals, fountains, and buildings decorated with Persian sayings. In short, Kashmir was a "grand jardin tout vert (407)," a view shared by the Mughals, including Abu'l-fazl who famously characterized Kashmir as a "garden of perpetual spring."¹⁹

What are the origins of this wonderful garden? one might ask. Bernier relates that, according to a Mughal legend, Kashmir was originally a lake, and that Pir Kacheb, a Sufi saint, would have sliced the mountain at Baramula, thereby emptying it of all its water and creating a natural fertile basin.²⁰ The French traveler appears to doubt this myth and prefers a more scientific explanation for the

15 MS. Douce Or. a.1 fol.23a, Bodleian Library, Oxford, around 1645–1650. Reproduced in *Voyage au Cachemire de François Bernier* (see note 11), 65.

16 British Museum, London. Reproduced in *Voyage au Cachemire de François Bernier* (see note 11), p.71.

17 From the *Mathnavi* of Zafar Khan, around 1645–1650. The Royal Asiatic Society, London. Reproduced in *Voyage au Cachemire de François Bernier* (see note 11), 69.

18 Aga Khan Trust for Culture/AKM00172. Reproduced in *Voyage au Cachemire de François Bernier* (see note 11), 77.

19 Richard M. Eaton, *India in the Persianate Age (1000–1765)* (Oakland, CA: University of California Press, 2019), 88.

20 This creation story comes from a Persian work that Bernier claims to have translated (404) but of which scholars have no trace.

formation of the Himalayan valley: an earthquake might have occurred, resulting in the sinking of the ground surface – a caldera that became, with time, the pleasant and fertile garden cherished by the Mughals. Despite this scientific hypothesis, however, Kashmir still held an undeniable aura of divine dimension for Bernier who claims that rivers of milk and honey flowed from its mountains,²¹ a clear reference to the promised land described in Exodus 3:8. Surah 47 of the Quran also refers to a paradisiac place where enchanted rivers carry not only water, milk, and honey, but also wine.²² It is unclear whether Bernier was aware of the biblical and qur'anic parallels regarding Paradise, but the French traveler colors Kashmir with both scientific and religious undertones, a paradox that deserves to be examined further.

Scholars have shown the influence that Pierre Gassendi (1592–1655) had on Bernier.²³ Frédéric Tinguely, for example, has argued that Kashmir was a laboratory of Gassendist philosophy for the Frenchman.²⁴ At once a place to be observed and the occasion to sharpen one's critical thinking, the remote Himalayan region became a land of ideas – instead of miracles – under the Bernier's pen. And thus, according to this scholar, the Mughals' "Paradis terrestre des Indes" disappeared under the philosophical thoughts of a *libertin*. Bringing first-hand observations of the wonders of the East to his French audience, Bernier morphed into a modern, secular prophet. Bernier's passage on the origins of Kashmir previously quoted nuances this argument, however, for while it does show the skepticism of the French traveler vis-à-vis a Sufi legend, it also indicates his unassuming and non-ironic acquiescence of the biblical (and qur'anic) understanding of paradise on earth.

According to Bernier, Kashmir was a garden of Eden – a spectacle of natural beauty infused with divine characteristics. But what, precisely, hid behind Kashmir's natural environment? The passages discussed thus far have hinted at a connection between the materiality of the natural world and the political and

21 "montagnes innocentes et décollantes de lait et de miel, comme étaient celles de la Terre de promesse" (406; these mountains may indeed be characterized not only as innocuous, but as flowing in rich exuberance with milk and honey).

22 A "Garden that has been promised to the reverent: therein lie rivers of water incorruptible, rivers of milk whose flavor does not change, rivers of wine delicious for those who imbibe, and rivers of purified honey" (47:15) *The Study Quran: A New Translation and Commentary*, ed. Seyyed Hossein Nasr (New York: HarperCollins, 2015), 1239.

23 Often considered Gassendi's disciple, Bernier published an *Abrégé de philosophie de Gassendi* (Lyon: Anisson, 1684).

24 Frédéric Tinguely, "Un paradis sans miracles: le Cachemire de François Bernier," *Études de Lettres* (2006): 55–69.

religious spheres. Examining Mughal allegories associated with Kashmir enables us to further analyze Bernier's letters.

A Garden of Mystics and Poets

When Bernier reached Kashmir, the province had already been under Mughal control for eight decades and, by the seventeenth century, it had become a customary summer residence for Jahangir and Shah Jahan, the first traveling to the valley six times between 1619 and 1627, the second visiting regularly every five years or so. What prompted Aurangzeb to embark on a similar voyage might have been to seek solace from the scorching heat of the Indian summers or to improve his health as Bernier suggests.²⁵ Equally plausible is the opportunity, for Aurangzeb, to situate himself squarely within a long line of illustrious ancestors who had created and solidified one of the largest and most powerful empires of the early modern world, one that encompassed Kashmir from the 1580s on and one that Kashmir came to symbolize.²⁶ Having demonstrated his imperial worth by waging – and winning – a war against his three brothers and by deposing his own father, Aurangzeb might have wished to seal the deal, particularly his 1659 victory over Dara Shikoh, Shah Jahan's favorite son whose personal inclinations toward the Himalayan valley were well known.²⁷ In transporting his entire court to Kashmir, Aurangzeb was asserting, perhaps even incarnating, his newly acquired thaumaturgic authority for everyone to witness.

Indeed, the emperor could not have ignored that, beyond its natural charm, Kashmir was intrinsically imbued with powerful political meaning and that his decision to travel to the valley, prompted by a poor health condition or not, would have been interpreted as a political gesture. In addition to ideal climatic conditions and political legitimacy, Aurangzeb might also have wished to enjoy cultural refinement, worldly pleasures, and spiritual enlightenment. Long described as the sternest and most religious of the Mughal emperors, Aurangzeb has recently been rehabilitated by scholars who have questioned traditional his-

25 In the first of his nine letters, Bernier mentions that Aurangzeb had recently recovered from an illness and that his decision to spend the summer in Kashmir was motivated by the wish to avoid a possible relapse (367).

26 Akbar is credited for sending his army to capture Kashmir in 1585. His visit to Srinagar, the valley's capital, in 1589, formalized Kashmir's annexation to the Mughal empire. See Eaton, *India in the Persianate Age (1000–1765)* (see note 29), 229. Bernier summarily retraces the historical conquest of Kashmir in letter IX (410).

27 Gandhi, "Locating Race in Mughal India" (see note 17), 93–4, 116–17, and 139–40.

topography according to which Aurangzeb was a rigorist Muslim and persecutor of Hindus.²⁸ What Audrey Truschke has shown, for example, is that Aurangzeb was, in fact, interested in courtly life and in non-Islamic traditions as his ancestors were, albeit to a lesser extent. By choosing to spend a summer in Kashmir, then, Aurangzeb might have conceivably been seeking some degree of enjoyment and pleasure appropriate for a courtly ruler.

And that is most certainly what he found when, along with Bernier and the court, he arrived in Kashmir in the early 1660s. For the valley's unequaled beauty, pure air, and cool temperatures were matched by a vibrant culture that had been encouraged by Aurangzeb's predecessors. Since the late sixteenth century, indeed, the valley had been shaped as a place of material and spiritual sophistication by Mughal emperors and their families. Akbar, Jahangir, Shah Jahan, and Dara Shikoh had patronized the building of gardens, mosques, shrines. Women, too, had taken an active role in promoting the landscape and the religious architecture of Kashmir, further strengthening the interrelatedness between nature, religion, and politics. Jahanara, for example, had a garden built in the north-eastern part of Kashmir, near a lake.²⁹ As for Jahangir's consort, Nur Jahan (1577–1645), she not only promoted the construction of buildings and gardens that were standing in all their splendor at the time of Aurangzeb's visit; she also made Kashmiri embroidery and shawls fashionable at court. Bernier, who underlines Kashmiri artisanship and industriousness in his letters, notes most particularly the fine wool and the intricate designs of the shawls manufactured in the area.

In addition to a flourishing textile industry, Bernier and Aurangzeb found a community interested in other, albeit less material developments. The topographical features of Kashmir had always protected the valley from invasions while securing haven for refugees fleeing other regions – Persians and Sufis in particular. Consequently, Sufi shrines and *khanaqahs*, Sufi meeting houses, existed long before the Mughals came to view and build Kashmir as their summer residence.³⁰ This long-established Sufi substrate was further nourished by members of the court who affiliated themselves with various Sufi orders.³¹ Shah Jahn, seconded

²⁸ Audrey Truschke, *Aurangzeb: The Life and Legacy of India's Most Controversial King*. (Stanford, CA: Stanford University Press, 2017).

²⁹ Ebba Koch, "The Bagh-i Safa alias Jharoka Bagh in Kashmir: Princess Jahanara's Garden on Manasbal Lake," *Objects, Images, Stories*, ed. Francesca Orsini (Oxford: Oxford University Press, 2021), 96–115.

³⁰ Eaton, *India in the Persianate Age (1000–1765)* (see note 29), 89–92.

³¹ On the influence of Sufism on the Mughals, see Muzaffar Alam, *The Mughals and the Sufis: Islam and Political Imagination in India, 1500–1750* (Albany, NY: State University of New York Press, 2021). On Dara Shikoh's life and his affiliation with Sufi orders, see Supriya Gandhi, *The*

by his elder and favorite son Dara Shikoh and by his daughter Jahanara, were instrumental in shaping Kashmir's natural and spiritual landscape. Zafar Khan, the governor of Kashmir between 1633 and 1639 and again in 1642, also contributed to establishing a tight-knit community of poets close to the Sufi-leaning imperial family. Kashmir, therefore, was a natural garden with strong religious and political hues.

Nature, Mughal emperors, and Sufi *pirs* (masters) were tightly connected in the valley as seen in several miniatures from Zafar Khan's historiography. These miniatures underscore the symbiotic relationship between natural elements and the Mughal court. In one, Shah Jahn is represented outdoors by Lake Dal examining jewels. The floral patterns on the cushion, carpet, and "throne" echo the blooms past Shah Jahan's bedpost which are accessible by hand. The double frieze accentuates the omnipresence of the natural element which is also present in the backdrop in the form of a river, trees, and muted mountains. Nature literally fills the miniature, as is the case with many others, such as one showing Dara Shikoh in Verinag garden.

Neither was this ode to nature unusual in Kashmiri-Mughal tradition, nor was it limited to miniatures. Seventeenth-century Mughal poetry, it turns out, was also replete with references to trees and greenery. As Sunil Sharma has shown in *Mughal Arcadia*, a form of pastoral poetry emerged in early seventeenth century India, precisely as Kashmir was incorporated into the Mughal realm, becoming shortly thereafter a favored summer retreat for Mughal emperors.³² This pastoral poetry derived from long-standing, often urban, space elegy that mingled three distinct but intertwined topoi: describing the expansiveness and richness of India, celebrating its architectural achievements, and marveling at its industrious culture.³³

This poetic tradition evolved in stages, first seeing an increased use of the metaphorical language of love to describe the symbiosis between the city and its inhabitants, as well as a focus on the population's multicultural and multireligious composition. The city had long been perceived as a synecdoche for empire

Emperor Who Never Was: Dara Shukoh in Mughal India (Cambridge, MA, and London: The Belknap Press of Harvard University Press, 2020).

32 Sharma, *Mughal Arcadia* (see note 12).

33 We have seen that Bernier was not too impressed with either the geographical makeup or the work ethics of Indians, but he was rather sensitive to India's architecture. See my article "A Moving Empire: François Bernier's Mosques, Mausoleums, and Monuments of 17th-Century Mughal India," *Reaching Across Borderlines: Collected Essays from the UNCW-IIIUI D.O.S Partnership*, ed. Diana Ashe and Caroline Clements (Wilmington, NC: University of North Carolina Wilmington William Madison Randall Library, 2022), 3–18.

in Mughal literature but when, from the sixteenth century on, urban elegies evolved into Kashmiri pastoral poetry, architecture became enmeshed with the natural world. In Kashmir, city and countryside came together harmoniously under the aegis of the Mughal emperor who started to be seen as a master gardener. Kashmir became the incarnation of the ubiquitous Persian garden, as well as the perfect allegory for the Mughal empire.

Bernier appears to have been aware of Kashmir as the empire's jewel and of Mughal poetic traditions (*masnavis*) – including pastoral Kashmiri poetry – and their symbolism. Although he failed to fully understand an unidentified poet, his letters indicate that he sought information regarding Persian poetry (413). His patron, a man of Persian heritage whose inquisitiveness toward Gassendi and Descartes's ideas Bernier stresses (369), might have indulged in satisfying the French traveler's curiosity when it came to Mughal matters by discussing miniatures and poetic productions.

Bernier in Kashmir: Being *firangi*

Bernier's description of the Kashmiri landscape corresponds to the seventeenth-century Mughal vision of the valley and could have been derived from viewing miniatures or from hearing about pastoral Kashmiri poetry from his patron, Daneshmend Khan. However incidental his knowledge of the Himalayan valley might have been, it was also, and undeniably so, direct and personal. In addition to observing water and gardens, Bernier lists, by names, several members of the court with whom he traveled or whom he met during his stay in Kashmir, thereby showing an intimate knowledge of not only the territory, but also its population.³⁴ In his letters then, Bernier presents the Mughal court and the nature of Kashmir to his French readers. He shows how the valley's unique environment was closely intertwined with people, particularly the Sufi-leaning members of the court and their poets. He introduces Kashmiri pastoral poetry and its symbolism to a European audience. Nevertheless, despite his close familiarity with India and Kashmir, Bernier remained a *firangi*, a foreigner.

³⁴ Traveling with the most prestigious Mughal notables – Aurangzeb, Raushanara Begum and the other women from the emperor's retinue, Daneshmend Khan, his patron, Bernier also mentions the presence of raja Raghu Nath, Fazil Khan, Mohammed Amin Khan (Mir Jumla's son), Diyanat Khan, and Fedai Khan (386, 401–02).

This, however, did not prevent him from trying to decipher the valley for himself. Adopting visualization, a common Sufi practice of meditation,³⁵ he ponders on the Kashmiri landscape and notes that the natural environment in Jashayri was characterized by details that caught his attention (415). The passage from the arid zone (Bhimbar) to temperate climate (Srinagar), for instance, was accompanied by a change in flora. On one side of the mountain, Bernier noticed what he refers to as Indo-European plants, while he saw European plants thrive on the other side. Kashmir was covered with

petites prairies, de pièces de riz, de froment, de plusieurs sortes de légumes, de chanvre et de safran, tout cela entrelacé de fossés plein d'eau, de canaux, de quelques petits lacs et de ruisseaux. Tout y est parsemé de nos plantes et de nos fleurs d'Europe, et couvert de tous nos arbres, pommiers, poiriers, pruniers, abricotiers et noyers, chargés de leurs propres fruits et de vignes et de raisins dans la saison. Les jardins particuliers sont pleins de melons, de pastèques (ou melons d'eau), de chervis, de betteraves, de raifort, de la plupart de nos herbes potagères et de quelques-unes que nous n'avons pas (407).

[Meadows and vineyards, fields of rice, wheat, hemp, saffron, and many sorts of vegetables, among which are intermingled trenches filled with water, rivulets, canals, and several small lakes, vary the enchanting scene. The whole ground is enamelled with our European flowers and plants, and covered with our apple, pear, plum apricot, and walnut trees, all bearing fruit in great abundance. The private gardens are full of melons, pateques, or water-melons, water parsnips, red beet, radishes, most of our potherbs, and others with which we are not acquainted.]

One could read this passage as Bernier's attempt at translating a foreign territory – Kashmir – to a European readership, in other words an attempt at making the unfamiliar familiar. I would like to suggest that Bernier accomplishes much more here. By identifying and listing the flora of Kashmir in an organized manner – crops, fruit trees, and produce – and by emphasizing the presence of grapevines, the Frenchman mimics Mughal poetry which Nicolas Roth has shown to be replete with precise and evocative horticultural nomenclature.³⁶ By providing a list of non-Persian names for plants, trees, as well as aromatic herbs, Bernier participates in the panegyric of Persian-speaking poets.

³⁵ *Sufi Meditation and Contemplation: Timeless Wisdom from Mughal India*, ed. Scott Kuggle (New Lebanon, NY: Omega Publications, 2012), introduction. This work offers translations of three Sufi pieces written in the early modern period, including one by Dara Shikoh, *The Compass of Truth*, on pages 125–64.

³⁶ Nicolas Roth, "Poppies and Peacocks, Jasmine and Jackfruit: Garden Images and Horticulture Knowledge in the Literatures of Mughal India, 1600–1800," *Journal of South Asian Intellectual History* 1 (2018): 48–78.

In addition to including elements of Kashmiri pastoral poetry, Bernier's writings merge two different geographical territories. Highlighting the abrupt change of weather the court experienced during its travel, Bernier explains that after suffering from excruciatingly hot temperatures in Punjab, the travelers came to delight at the coolness of the Kashmiri valley. Bernier felt as if he had entered paradise, which for him not only implied a temperate climate but also the fact that he had been transported from India to Europe: "ce qui m'a surpris davantage dans ces montagnes, c'est de m'être trouvé tout d'un coup comme transporté des Indes en Europe" (415; What surprised me still more was to find myself, as it were, transferred from the Indies to Europe). Notwithstanding the absence of rosemary, thyme, marjoram, and hyssop, he found himself in the middle of a forest rich in pines, live oaks, elms, and sycamores and imagined to be in "nos montagnes d'Auvergne" (414). Kashmir, therefore, was the distant Asian valley where Bernier was transported back to Europe while being fully immersed in Indian geography and culture. For him, Kashmir was heaven on earth because the valley represented two places at once – Europe and Asia, each possessing an equivalent degree of sophistication.³⁷

More importantly perhaps, Kashmir was where natural beauty, artistic creations, and religious and political traditions converged, prompting an astute observer like Bernier to examine a web of intricacies, at times evaluating his surroundings critically and at other moments accepting that one did not always know or understand the causes of a phenomenon under consideration. In short, Kashmir allowed for a complex, but ideal and inclusive reality that could sometimes be deciphered, and sometimes not. By proposing such a palette of options – from observing and analyzing to simply surrendering to it – Bernier provides his own explanation as to why Kashmir could be viewed as paradise.

Bernier's literary and intellectual engagement with Mughal culture occurs most strikingly perhaps when he recounts a gathering of poets upon Aurangzeb's arrival. Qudsi, Kalim, and Fani were among the most famed Persian poets who had extolled the beauty of Kashmir under Shah Jahan.³⁸ During Aurangzeb's visit, others continued to gather and sing the beauty of Kashmir to the court and to its French appendage. The meeting would have looked like that of a miniature in which we see Zafar Khan, dressed in blue, engaged in a lively conversation, and surrounded by musicians, scribes, book artists, and poets. Present in the assembly are men of various age groups and skin complexions seated on carpets.

³⁷ On European and Asian similarities, see Rubiés, "Race, Climate and Civilization in the Works of François Bernier" (see note 6).

³⁸ Sharma, *Mughal Arcadia* (see note 12).

The details are quite extraordinary: some have beards (black, grey, white), others do not; all have their head covered, but their headdresses and garments are different in style, color, and presumably cloth, indicating the group's diverse composition, the pluralistic element of the Kashmiri society having long been recognized and explained, in part, by the topographic features of the area. Although the scene takes place inside, nature is everywhere: the backdrop is a series of tent panels decorated with plants and trees in bloom; carpets are full of flowers; and the window behind the two main figures attracts our gaze toward the exterior where greenery dominates, and where cypresses point to high mountains in the distance. Nature is both inside and outside; men are both covered and surrounded by nature, and they are most certainly reciting poetry.³⁹

When Bernier found himself in the middle of such a gathering, he began by stressing the hyperboles of the poetry, suggesting some of the Indian poets' verses might be too exaggerated. After his initial critique, however, the Frenchman added his own praise of the valley, one that, instead of condemning all Mughal poets for eternity, echoed and complemented their poetic renditions.

dès lors que nous fumes arrivés, tous les poètes à l'envi les uns des autres, Cachemiris et Mogols, s'efforcèrent de faire des poésies à la louange de ce petit royaume pour les présenter à Aurangzeb qui les recevait et les récompensait agréablement. Il me souvient même entre autres qu'il y en eut un qui, exagérant la hauteur extraordinaire des montagnes qui l'environnent et qui le rendent comme inaccessible de toutes parts, disait que c'était le sommet de ces montagnes qui était cause que le ciel se retirait en voûte comme il paraît ; et que Cachemire, étant le chef-d'œuvre de la nature et le roi des royaumes du monde, il était convenable qu'il fût inaccessible, pour pouvoir jouir d'une paix et d'une tranquillité inébranlable commandant à tous sans pouvoir être commandé. Il ajoutait que la raison pour laquelle la nature l'avait entouré, comme j'ai dit au commencement, de montagnes dont les unes, [à] savoir les plus hautes et les plus éloignées, étaient en tout temps toutes blanches, couvertes de neige, et les plus basses et les plus proches de la plaine, toutes vertes et couvertes de bois, était parce que le roi des royaumes du monde devait être couronné d'une couronne très précieuse dont le haut et les rayons fussent de diamants et le fond d'émeraudes. Si le poète eût encore ajouté (disais-je à mon nabab Daneshmend Khan qui me voulait faire admirer toutes ces poésies) que tous ces grands pays de montagnes qui l'environnent comme le Petit Tibet, l'État du raja Gamon, Kachgar et Srinagar, se doivent comprendre sous le royaume du Cachemire puisque, selon les histoires du pays, ils en ont autrefois dépendu et par conséquent que le Gange d'un côté, l'Indus d'un autre, la Chenab d'un autre et la Yamuna d'un autre, sortent du royaume du Cachemire, que ces fleuves, avec tant d'autres qui en sortent, valent bien le Gizon, le Fizon et les deux autres, et qu'enfin il eût conclu que c'était assurément ce lieu-là qui était le Paradis terrestre plutôt qu'en Arménie, c'eût été, ce me semble, encore enchérir davantage sur la matière. (410–11)

39 RAS Persian 310, 19b. Royal Asiatic Society of Great Britain and Ireland.

[We were no sooner arrived than Aureng-Zebe received from the bards of both nations poems in praise of this favored land, which he accepted and rewarded with kindness. They were written in a strain of extravagant hyperbole. One of them, I remember, speaking of the surrounding mountains, observed that their extraordinary height had caused the skies to retire into the vaulted form which we see; that Nature had exhausted all her skill in the creation of this country, and rendered it inaccessible to the attack of hostile force; because, being the mistress of the kingdoms of the earth, it was wise to preserve her in perfect peace and security, that she might exercise universal dominion without the possibility of ever being subject to any. The poet went on to say that the summits of the higher and more distant mountains were clothed resplendently in white, and the minor and more contiguous preserved in perpetual verdure and embellished with stately trees, because it was meet that the mistress of the kingdoms of the earth should be crowned with a diadem the top and rays of which were diamonds issuing from a base-work of emeralds. ‘The poet’ (I remarked to my Navaab Danechmend-kan, who wished me to relish these productions) ‘might easily have amplified his subject. He could, with a pardonable license, have included the neighbouring mountainous regions within the kingdom of Kachemire, since it is pretended that they were once tributary to it. I mean Little Tibet, the states of Raja Gamon, Kachguer, and Serenaguer. He might then have gone to say that the Ganges, the Indus, the Chenau, and the Gemna, issue from the kingdom of Kachemire, rivers which cannot yield in beauty and importance to the Pison, the Gihon or the two other rivers spoken of in Genesis; and that it may therefore be reasonably concluded that the Garden of Eden was planted in Kachemire, and not, according to the received opinion, in Armenia.]’

Once again bringing biblical traditions to India,⁴⁰ Bernier recalls medieval and early modern maps which inscribed paradise on their eastern edges. He also shows himself to be as good a poet as the best poets of Kashmir by taking on the multidimensional religious underpinnings of the valley and by suggesting that both Sufi Muslims and Christians had been aware of the existence of this heaven on earth. Bernier inscribes himself in the circle of Indian poets using botanical and religious knowledge. It is Kashmir and its natural environment that have allowed him to notice, evaluate, and deduct, as well as to assert his presence in Mughal lands, thereby showing his worth to both his Indian and European patrons, albeit in different ways.

Conclusion

As a natural phenomenon, nature levels the field: whether a Mughal prince, a carrier, or a *firangi*, one witnesses and admires nature’s breathtaking beauty, just as

⁴⁰ According to Gen 2:10: “A river flowed out of Eden to water the garden, and there it divided and became four rivers.” These were understood as being Pishon, Gihon, Tigris, and Euphrates.

one must bear its caprices. When faced with nature's raw elements for instance, all travelers must dig deep within themselves to escape its destructive power. On the other hand, when presenting its gentler form to humans – when in Kashmir during the summer months for example – nature might prompt them to carry out observations, test and develop ideas, foster creativity. As one attempts to make sense of natural phenomena, one can choose to observe and reason, to glorify the Creator and the Mughal emperor, to extol nature's majesty, or all of these at once. Simultaneously dictating certain behaviors and responses from men and allowing for both intellectual and artistic stimulation, nature is dually reflected in Bernier's letters which showcase the material and finite reality of human life in all its basest aspects alongside the conception of loftier ideas – and sometimes ideals – about life itself.

Nature in Kashmir, therefore, serves as a cipher that Bernier interprets for his own pleasure, and also for his survival. Furthermore, while allowing himself to belong to and to commune with the valley's environment, nature brings him back – intellectually – to his native kingdom and to the French milieus with which he was familiar, Auvergne and the Mediterranean. At the same time, by being able to show familiarity with and knowledge of the Kashmiri flora, Bernier anchored himself in the Mughal poetical and political landscape. By adding to the local lyric productions, he became – to a discerning audience – a Kashmiri poet while maintaining a critical distance between himself and the Mughal court.

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Cosmology and Pre-Modern Anthropology

Abstract: This article examines the emergence of a new concept of nature since the sixteenth and seventeenth centuries that was conditioned by major events such as the European discovery of America, the renewed reception of classical-antique notions of the cosmos, and of some Christian theories relevant to this topic. Subsequently, this study will introduce the contemporary mechanistic worldview and the idea of human existence as it was developed primarily by René Descartes, contrasting it with a more discriminating understanding of human existence as promoted by early modern thinkers and their concepts of the surrounding nature. In particular, the focus will rest on the discourse concerning the known planets from Galilei to Kant. Since no one could visit the planets, literary fiction, often based on dreams, assumed a central function in projecting notions of natural environments in outer space. Finally, this article will conclude with a discussion of texts by poets and natural scientists who were inclined to present nature (geography and biosphere) as projected onto the inhabitants of other planets. Granted, in the early modern age, most scientists were driven by a mechanistic and physical framework. However, poets and some natural scientists relativized that perspective and offered a remarkable counter-position that later was to undermine the subsequent ethos of disenchantment Max Weber had famously discussed.

Keywords: Early modern concepts of nature, anthropology, nature, cosmology, biospheres in outer space, inhabited worlds in the cosmos

Pre-Conditions of a Pre-Modern Anthropology

In his book, *Future of Geography*, Tim Marshall focuses on the relationship between human beings and the cosmos. The idea of the cosmos has always, as he opines, influenced people regarding their notion of the world, and continues thus until today. The earliest stories of Genesis provided explanations for the existence of the universe, of human beings, and of the living and non-living nature. The notion of cosmic space especially influenced the various cultures and promoted scientific progress.¹

¹ Tim Marshall, *The Future of Geography. How Power and Politics in Space Will Change Our World* (London: Elliot and Thompson, 2023). German edition: *Die Geografie der Zukunft. Wie der*

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To that end, I will examine texts that have probed the relationship between the cosmos (i.e., relating to biospheres and the natural environments within the cosmos) and pre-modern anthropology within European thinking of the early modern age, as mirrored in narrative literature, but also within scientific texts, particularly from those by Galileo Galilei (1564–1642) to those by Immanuel Kant (1724–1804), and also in esoteric texts by Emanuel Swedenborg (1688–1772). It is highly illuminating to realize how many authors dedicated themselves to the exploration of outer space already during that period.

Since no one has ever encountered true aliens or fantastic animals from distant planets, all the authors to be discussed here depended on their imagination about the cosmos and on the literary traditions for their depictions.² In their literary texts as influenced by sciences and in their scientific texts as influenced by literature, they compared the life of intelligent inhabitants of outer space with the life on Earth: people, society, and the natural environment were studied in this form of interaction. The question regarding a universal human value system (*conditio humana*), which could also be found among other living beings in outer space, was raised as well.

There were three historical components (the discovery of the New World, the ancient traditions, and the Christian worldview) that were highly influential for the projection of the biosphere and life of the aliens in the outer space, all three already extensively discussed, of course, but not within the context of the rise of early modern cosmology.

First: there was the discovery of the New World by the Europeans, and later also of Australia and the islands in the Pacific Ocean; but the geography of foreign continents was not the only element that attracted attention; more important was the observation of foreign cultures. Various authors resorted especially to the binary differences in their worldviews contrasting culture and nature, and civilization versus wilderness. Accounts of travels to America and to the world of the Pacific revealed different forms of cultures, which hence resulted in partially fanciful accounts; even so, some of those ideas appear subsequently in the descriptions of the cosmos.³

Kampf um Vorherrschaft im All unsere Welt verändern wird (Munich: Deutscher Taschenbuchverlag, 2023), 10.

² Fictitious, but inspiring are some of the characters in the movies: the sandworms in *Dune* (1984), the cockroach in *Men in Black* (1997) or the aliens like the Chewbacca and Ewoks in *Star Wars* (1977 and until today). The sitcom with the character Alf (=Alien Life Form) from the planet Melmac, who caused a crash landing with his spaceship in the garage of the Tanner family and was subsequently kept hidden from the authorities by the family, ran on TV from 1986 to 1990.

³ The topic cannot be discussed here. Scientific investigations could show here numerous connections to an inhabited cosmos. Michael Harbsmeier, *Wilde Völkerkunde. Andere Welten in deutschen Reiseberichten der Frühen Neuzeit* (Frankfurt a. M. and New York: Campus, 1994); *Neue*

When sailors began to navigate to foreign continents and had to cross open and dangerous oceans, this experience triggered the emergence of many fantastic images of monsters and other dangerous creatures, many of those inherited from traditions of the Middle Ages.⁴ However, we can observe already here an important difference between their accounts and the narratives about the cosmic biosphere. On earth, for example, demonic animals or sea monsters tended to threaten the sailors. For instance, Olaus Magnus (1490–1557) designed the *Carta Marina et descriptio septentrionalium terrarum* in 1539, in which are depicted numerous dangerous creatures.⁵ However, these motifs seem to have played a minor role in the stories about space. In the reports about outer space from this epoch, we encounter more friendly and less aggressive, but still exotic types of animals that were only partially like those here on earth as described in the sailors' stories.

A very important aspect was the question of communication with the natives of the discovered countries. This problem also arose in the descriptions that occurred when humans met aliens and tried to communicate with them in exchanges essential for the survival of the fictional astronauts. However, those portrayals proved to be difficult, though not impossible, in the minds of various early modern writers such as Francis Godwin (1562–1633) and Cyrano de Bergerac (1619–1655) (see below).⁶ The few comments made so far serve to indicate that, at

Impulse der Reiseforschung, ed. Michael Maurer. Aufklärung und Europa (Berlin: Akademie Verlag, 1999); Urs Bitterli, *Alte Welt – Neue Welt. Formen des europäisch-überseeischen Kulturkontaktes vom 15. bis zum 18. Jahrhundert* (Munich: Deutscher Taschenbuchverlag, 1986); Urs Bitterli, *Die ‚Wilden‘ und die ‚Zivilisierten‘. Die europäisch-überseeische Begegnung* (Munich: Deutscher Taschenbuchverlag, 1982); Hans Ritz, *Die Sehnsucht nach der Südsee. Bericht über einen europäischen Mythos* (Göttingen: Muri, 1983).

4 Chet van Duzer, *Seeungeheuer und Monsterfische. Sagenhafte Kreaturen auf alten Karten* (Darmstadt: Philipp von Zabern, 2015).

5 Olaus Magnus, *Die Wunder des Nordens*, ed. Elena Balzamo and Reinhard Kaiser (Frankfurt a. M.: Eichborn, 2006). The map is enclosed in this edition.

6 Thomas Nagel made clear how difficult it is to answer this question. Because when asked what it feels like to be a bat, there are two answers that are incompatible. In his essay, Nagel addressed the hard problem of consciousness, physicalism/empiricism, or subjective experience, and questioned whether any statement at all can be made about an alien such as that of a bat. “And if there is conscious life elsewhere in the universe, it is likely that some of it will not be describable even in most general experimental terms available to us. [. . .] The subjective character of the experience of a person deaf and blind from birth is not accessible to me, for example, not presumably is mine to him. This does not prevent us each from believing that the other's experience has such a subjective character.” Thomas Nagel, *What Is It Like to Be a Bat? Wie ist es, eine Fledermaus zu sein?* (Stuttgart: Reclam, 2022), 18. The fundamental critique of reductive physicalism is found in Nagel's volume *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature is Almost Certainly False* (Oxford: University Press, 2012).

that time, many questions concerning the exploration of the biosphere on other planets involved a strong anthropological component and a direct reference to known biological realities.

Second: Ancient Ideas. During the Renaissance, the impact of ancient philosophers and their fanciful accounts of long-distance journeys played a decisive role, as did natural-scientific texts from that period (i.e., those by Herodotus, Gaius Plinius Secundus Maior, and others). Already Homer refers in his *Ulysses* to fantastic living creatures (lotus-eaters, cyclops, laestrygonians, sirens, etc.), which the shipwrecked hero encounters on the sea and on the islands that he visits.

The history of natural philosophy from the ancient world to the early modern period oscillated between religious-mythical and scientific-technical concepts about the cosmos and extraterrestrial beings. Plato had already presented some ideas regarding cosmology in his treatise *Timeus* (ca. 360 B.C.E.).⁷ He considered the cosmos as being part of nature as a global phenomenon, that is, as a part of a world that had evolved in the course of time and as a material reality. The realm of ideas, however, he regarded as everlasting and eternal. Plato's problem, however, was to find an answer to the question of how ideas and reality are connected. That meant in his theory that there must be a scaled causality in the great chain of beings (*scala naturae*). This conception can also be found in the epistemological philosophies of Aristotle.⁸ Through the actions of a Platonic demiurge,

René Descartes inspired a mechanical view based on physics with his account of a *res extensa*. Since statements about mental experiences cannot be objectified, they should be reduced to physically (empirically) verifiable theses. From such considerations emerged a theory of physicalism, which was represented in its radical form at the beginning of the 20th century by the Vienna Circle. This circle was mainly concerned with language. Subjective experiences should be presented in an objective language to make such single experience verifiable and confirmable. Reductionist physicalism can represent the complex process in a thirsty human body, but it cannot explain what it feels like to be thirsty. It is therefore justified to consider Descartes as the precursor and perhaps even the inventor of this way of thinking.

Alongside Descartes, it was, above all, Gottfried Wilhelm Leibniz (1646–1716) who promoted the ideas of physicalism. Gottfried Wilhelm Leibniz, “Zur allgemeinen Charakteristik,” id., *Hauptschriften zur Grundlegung der Philosophie*, trans. Artur Buchenau, introduced by Ernst Cassirer, vol. 1 (Hamburg: Felix Meiner, 1996), 16–23. The authors presented in the essay below, on the other hand, saw themselves as being able to describe the two aspects, objective and subjective consciousness for the aliens in outer space, thanks to their empathy and imagination.

7 Platon, *Timaios*, ed. Friedrich Schleiermacher, vol. 5 (Reimbek bei Hamburg: Rowohlt, 1980), 142–213.

8 Arthur O. Lovejoy, *The Great Chain of Being. A Study of the History of an Idea* (Cambridge, MA: Harvard University Press, 1936). The doctrine was outlined in the book *Timeus* (Plato), expanded later by Aristotle. As a metaphysical system it was a frequently occurring tradition in the Neoplatonism. The theory of the divine emanation was widely used in the Middle Ages until the eighteenth

the planets, above all the earth and its living creatures, but also many variations of living forms on other heavenly bodies, had come into being. In contrast to Plato, for whom the realm of ideas was eternal and the cosmos transient, Aristotle held that the cosmos was eternal. This meant that the forms (*hyle*) were eternal whereas the life of each individual person was transient. Ultimately, the authors considered in this essay will be shown to prefer Plato's position.

From early on, Aristarchos of Samos (310–230 B.C.E.) carried out calculations regarding the movement of planets. The Neo-Platonists Proclus (412–485 B.C.E.) and Anaxagoras (499–428 B.C.E.) promulgated the position that there would have to be life on the moon. Thinkers from the Greek atomists, among them Democritus (460–370 B.C.E.), suspected that the outer space was populated by an infinite number of different living beings. Finally, Epicurus (341–270 B.C.E.) wrote: "There are innumerable worlds, partly similar to this world, partly dissimilar."⁹

Plutarch (45–120 B.C.E.), in his treatise on the moon, discussed all the theories about the cosmos known within his lifetime. For him, the moon was a planet like earth – with wonderful landscapes, and inhabited by living beings looking very similar to people on earth: "The inhabitants of the moon, if they exist, probably have a fragile body and can survive with any kind of food."¹⁰ For Plutarch it was important to point out that a cosmologist can find all basic elements for the development of the human soul on the moon as well as on the earth.¹¹

Lucian of Samosata (120–180 B.C.E.) wrote two narratives that became powerful inspirations for ancient and later conceptions of the moon. Those were congenially translated by Christoph Martin Wieland into German (1788/1789).¹² Here, the moon-voyager Ikaromenippus encountered many wild and hostile creatures on that heavenly body. These did not display a peaceful behavior toward the other living creatures; instead, they fought each other in fierce wars. The traveler

century. "Alle Wesen sind von Gott einmal geschaffen worden, auf der Erde wickeln sie sich lediglich aus (évolution), neue Wesen können nicht mehr entstehen." [All beings were created once by God, on Earth they merely wind themselves out (evolution), new beings can no longer come into being.] Wolf Lepenies, *Das Ende der Naturgeschichte. Wandel kultureller Selbstverständlichkeiten in den Wissenschaften des 18. und 19. Jahrhunderts* (Frankfurt a. M.: Suhrkamp, 1978), 41.

⁹ Epikur, *Briefe, Sprüche, Werkfragmente*, trans. and ed. Hans-Wolfgang Krautz (Stuttgart: Reclam, 1980), 11, no. 45.

¹⁰ Plutarch, *Das Mondgesicht/De Facie in Orbe Luna*, trans. and ed. Herwig Görgemanns (Zürich: Artemis Verlag, 1968), 50, No. 21.

¹¹ Plutarch, *Das Mondgesicht* (see note 10), No. 25.

¹² Lukian von Samosata, *Lügendgeschichten und Dialoge*, ed. Christoph M. Wieland (Nördlingen: Greno, 1985), 49–85. Wieland's translation inspired German-language literature to produce a significant collection of utopian works, which need not be discussed here because of their specific thematic.

also met diverse but human-like beings who were very similar and yet also very alien in comparison with human beings. Among the Selenites (named after the goddess Selene), there existed only beings of male nature; the Dendrites (tree-like beings) could reproduce only by way of implanting their organs of reproduction in the ground of a garden. On the moon, food was not chewed and swallowed but was rather inhaled in the form of a vapor. The inhabitants of the moon mixed the bodily perspiration with tears and honey which then created a tasty cheese. When a Selenite died, he dissolved into a cloud of smoke. Lucian was very imaginative regarding the cosmos; he also voiced hefty criticism toward the conditions here on earth and inspired many authors to develop further the literary motifs and explore more deeply the questions that he had asked. His ideas influenced not only literature but also the scientific view of the planets into the fifteenth century. A comparison between the ideas of Lucian and the authors of the early modern period would be productive, but here is not the space to pursue this idea further.

Third: as a final and third point in this section on the presuppositions that shaped the descriptions of alien worlds, the role of Christian theology must be briefly addressed. The question of whether the moon and the known planets were inhabited by living creatures represented a considerable challenge for early modern theologians. Nicholas of Cusa (1401–1464) was one of the first to reflect upon this phenomenon, writing that: “*Terrae igitur figura est nobilis et sphaerica et eius motus circularis, sed perfectior esse potest*” [So the shape of the earth is noble and spherical, its movements circular, but it could be more perfect].¹³ Nicholas Cusanus also presented a new idea of a world in its physical and metaphysical entirety, which consists of three concepts: *unitas*, *alteritas*, *connexio* (unity, plurality, connection). Nicholas argued that God created the unity and at the same time both the plurality and the connection between the two remaining concepts. The three terms pertain not only to human existence and cognition, but also to our conception of the entire cosmos. And God gives humankind the ability to recognize the material earth and the whole cosmos as both a material and spiritual entity. The theologian differentiated between many human perceptions, from which people had also created a cosmography of the universe.¹⁴ In contrast, the model and ideas of Cusanus made it possible for the first time in the late Middle Ages to imagine alien worlds in space which could be found beyond the

13 Nikolaus von Kues, “De docta ignorantia,” id., *Philosophisch-theologische Werke*, ed. Karl Bormann, vol. 2 (Hamburg: Felix Meiner, 2002), 94. On astronomy in the Middle Ages, see Otto Mazal, *Die Sternenvelt des Mittelalters* (Wiesbaden: VMA-Verlag, 2001).

14 Kues, *Philosophisch-theologische Werke*, vol. 2, 94. On Kepler’s understanding of the works of Kues, see Hans Blumenberg, *Die Vollzähligkeit der Sterne* (Frankfurt a. M.: Suhrkamp, 2000), 314.

known planetary system. In this way, Nicholas made it possible to imagine many additional worlds beyond our own in outer space.

According to Christian doctrine, God had created the earth and the cosmos in six days and placed the first people inside of paradise until they were expelled from there. Later, Christ redeemed humankind on the cross. This narrative led to a series of problematic theological discussions concerning the meaning of creation and redemption, triggered in the epoch of the Renaissance by the natural sciences with their mathematical concepts and a physical worldview (natural law, natural constants), and triggered by the new cosmology as determined by the ideas of a multitude of cosmic worlds.¹⁵

Since the act of Genesis, i.e., the creation of nature and living beings took place in a mythological, bygone time, scientists could propose diverse opinions about the origin and further development of the cosmos at liberty. Some aspects of the discussions at that time were: Was the creation an act of *creatio ex nihilo*? When did Creation happen? How long has the earth existed until now? When did the Flood happen? When will the Apocalypse occur? Bishop James Ussher (1581–1656) tried to provide some answers. The day of Creation, according to his calculations, took place on October 23, 4004 (B.C.E.). The Flood occurred in 2348 (B.C.E.).¹⁶ These and others events represented important points in time in a linear narrative.

While Aristotle considered the cosmos eternal, Christian thought developed the idea of a beginning of nature and the cosmos and a terrible and apocalyptic end of it. This made it possible for Renaissance cosmologists to thematize the question of the evolution of the universe. Nevertheless, the Christian idea of the cosmos mostly remained, quite surprisingly, unchanged and almost static. Theologians held that this terrestrial space created by God was imagined like an unchanging stage in the theater on which the drama of stars and planets was played out.

Building on these beliefs, Francis Godwin viewed the cosmos through a Christian lens and revealed a close connection between Christian thinking and the notion of the cosmos. According to his opinion, Christians lived on the earth and also on the moon. For instance, hardly had the moon traveler Gonsales landed on

¹⁵ Many theological discussions have therefore been held around the question of whether the act of redemption on the cross occurred only for the inhabitants of the earth or for the entire universe.

¹⁶ James Ussher, *Annales Veteris Testamentis, a prima mundi origine deducti: Una cum rerum Asiaticorum et Aegyptiacarum chronico, A temporis historici principio usque ad Maccabaicorum initio* (London: Ex official J. Flesher & protestant in aedibus G. Bedell, 1650), 1–4. Until today, three basic lines of explanation can be found: theories of chance, theories of the action of natural laws and of natural constants, and theological ideas of creation, the latter mostly connected with ideas of Intelligent Design.

the moon, when he was discovered by inhabitants who looked very similar to human beings. After the first moment of initial shock, he made the sign of the cross and called out: “Jesus, Maria!” Hardly had he spoken those words when the aliens then knelt, raised their hands, and appeared to pray. What they said, the traveler did not understand.¹⁷

According to many authors in the early modern period, God had also created the inhabitants of outer space. The example mentioned above confirms that in the early modern period, Christian religion played a decisive role in cosmology and in the analysis of nature and people, which was of enormous importance, as theology provided as the only scholarly school of thought to provide metaphysical answers to the question which the natural sciences cannot answer even until today: Why is there something; and why is there also nothing?¹⁸

The Question Concerning Pre-Modern Anthropology

Paolo Rossi claimed in his broadly-based history of the emergence of the early modern natural sciences that Johannes Kepler (1571–1630), Galileo Galilei (1564–1642), Tycho Brahe (1546–1601), along with several other lesser-known researchers, had destroyed ancient cosmology but not the traditional view of humankind.¹⁹ According to Rossi, those opposed to the Cartesian mechanics rejected Aristotelianism and were also opposed to Cartesian anthropology, that is, they did

17 Francis Godwin, *The Man in the Moon: or a Discourse of a Voyager Thither by Domingo Gonsales* (London: John Norton, 1638; reprint: London: Didcot House, 2017), 37. Francis Godwin, *Der Mann im Mond oder Der Bericht einer Reise dorthin von Domingo Gonsales dem rasenden Botschafter*, ed. Klaus Völker (Frankfurt a. M. and Berlin: Ullstein, 1986), 48.

18 This question had been raised by Gottfried Wilhelm Leibniz for metaphysics in 1714: “Pourquoui il y a plus tôt quelque chose que rien?” [Why is there something and not nothing?] Gottfried Wilhelm Leibniz, *Principes de la Nature et de la Grace fondés en Raison* (Hamburg: Meiner, 1960), 12. On this question see Jim Holt, *Gibt es alles oder nichts? Eine philosophische Detektivgeschichte* (Reinbek bei Hamburg: Rowohlt, 2012).

19 Paolo Rossi, *Die Geburt der modernen Wissenschaft in Europa*, trad. Marion Sattler Charnitzky and Christiane Büchel (Original date; Munich: Beck, 1997), 139; Italian edition: *La nascita della scienza moderna in Europa* (Rome and Bari: Laterza, 1997). This view has been the subject to controversies. “The transterrestrial perspective also led to an overcoming of anthropocentrism.” Marie-Luise Heuser, “Transterrestrik in der Renaissance: Nikolaus von Kues, Giordano Bruno, Johannes Kepler,” *Von Menschen und Außerirdischen. Transsterrestrische Begegnungen im Spiegel der Kulturwissenschaft*, ed. Michael Schetsche and Martin Engelbrecht (Bielefeld: Transcript, 2008), 56.

not accept the mechanistic conception of life.²⁰ With the help of this thesis, we can specify the central question of the present investigation more precisely. What was pre-modern anthropology like, and (why) did it include the cosmic biosphere and the notion of nature prevalent in the early modern period? What were the anthropological proposals that were not based on mechanical thinking? The examination of the following contributions will reveal how diverse the various answers to this issue prove to be.

We may assume that the fairly routine idea of people on extended stays in space (i.e., International Space Station; touristic travels) began with the first flights into space since 1961, and will most likely replace the present notion of anthropology with new perspectives and theories. In the early modern period, the new cosmology as developed by scientists and philosophers from Galilei to Kant and the authors who followed them replaced existing conceptions of humanity's connections to nature. To outline better this process of replacement, the contemporary cosmology and phantastic literature (i.e., voyages to the planets and the sun) can serve well to illustrate that transformation.

Two concepts are now to be presented briefly: First, we must examine the question concerning the definition of anthropology and its place in the philosophical tradition. Jürgen Habermas offered a pragmatic argument when he formulated in his contribution to the *Fischer-Lexikon* from 1958:

Der Gedankenkreis der philosophischen Anthropologie ist zwar so alt wie die Philosophie selber [. . .]; aber die eigentümliche Stellung dieser Disziplin zwischen Theorie und Empirie, abzulesen an ihrer Aufgabe, wissenschaftliche Resultate philosophisch zu interpretieren, erlaubt eine genaue Datierung: erst mussten sich die Wissenschaften vom Menschen, von der biologischen Anthropologie bis zur Psychologie und Soziologie, entwickelt haben, damit ein Bedürfnis nach theoretischer Deutung ihrer empirischen Ergebnisse auftrat.²¹

[The theoretical model of philosophical anthropology is as old as philosophy itself . . . but the curious position of this discipline between theory and empiricism, as illustrated by its task to interpret scientific results in a philosophical manner, facilitates a precise dating. First the science of human beings, from biological anthropology to psychology and sociology, had to be developed before a need could arise for a theoretical interpretation of its empirical results.]

Habermas differentiated in his survey between a biological anthropology, which pursues a comparison with animals and embraces the idea that the human being would have to be explained at least partially through biological anthropology, and

²⁰ Rossi, *Die Geburt* (see note 19), 22.

²¹ Jürgen Habermas, "Philosophische Anthropologie (ein Lexikonartikel), 1958," id., *Kultur und Kritik. Verstreute Aufsätze* (Frankfurt a. M.: Suhrkamp, 1973), 91–2.

an ethnological anthropology which focuses on the comparison of cultures. He also added the third aspect of philosophical anthropology which examines the essence of human beings and their lifeworld.²² Today we would have to widen the concept, as developed in the 1980s, with perspectives from historical anthropology.²³ Habermas also pointed out the difference between ontology and existence, hence between theology (especially the concept of Genesis) and anthropology in the sense as defined by Johann Gottfried Herder. Herder wrote in 1784 that the human being had been the first within creation to be released into freedom.²⁴

Already here an important differentiation between environment and the world at large becomes noticeable, that is, between cosmos and earth.²⁵ The historical and systematic aspects developed by Habermas make it possible to assume differences between a modern and a pre-modern anthropology. How ideas about such a pre-modern anthropology had been developed in the early modern period, and how some of them entered the world of literature, will be the topic of the

22 Anaxagoras believed that humans were the smartest of all animals because they worked with hands. *Die Vorsokratiker*, ed. Wilhelm Chapelle (Stuttgart: Alfred Kröner, 1968), 279. Eike Bohlken and Christian Thies noted for the Middle Ages: Although there were already texts on people in the Middle Ages – the most outstanding example is *De homine* by Albertus Magnus (1200–1280) – the question of people initially remained so closely integrated into a general, theologically oriented metaphysics that it was not possible to speak of anthropology as an independent discipline. “Einleitung: Was ist Anthropologie?” *Handbuch Anthropologie. Der Mensch zwischen Natur, Kultur und Technik*, ed. Eike Bohlken and Christian Thies (Stuttgart and Weimar: Metzler, 2009), 1–10; here 1.

23 Jakob Tanner, *Historische Anthropologie. Eine Einführung* (Hamburg: Junius, 2004); Richard von Dülmen, *Historische Anthropologie. Entwicklung, Probleme, Aufgaben* (Cologne, Weimar and Vienna: Böhlau, 2000). Today, biological anthropology sees itself as evolutionary anthropology; cf. Marianne Sommer, *Evolutionäre Anthropologie* (Hamburg: Junius, 2015). The problem was already known earlier: Georges-Louis Leclerc de Buffon wanted to leave out astronomy in his natural history, but since the earth is closely connected to the cosmos, he had to deal with it. This meant including living beings and their biosphere in the cosmos. Georges-Louis Leclerc de Buffon, *Allgemeine Naturgeschichte* (Frankfurt a. M.: Zweitausendeins, 2008), 93. The first edition dates from 1749. Alexander von Humboldt discussed the connection between human existence (nature and spirit) and the cosmos in his book *Kosmos. Entwurf einer physischen Weltbeschreibung* (Stuttgart and Augsburg: Cotta, 1845/1862). In philosophical anthropology, it was Max Scheler who first took up the subject in the book *Die Stellung des Menschen im Kosmos* (Bern and Munich: Francke, 1928). Scheler emphasized humans’ openness to the world, the possibility to think further than sensory perception allows.

24 Johann Gottfried Herder, “Ideen zur Philosophie der Geschichte der Menschheit,” id., *Herders Werke*, ed. Regine Otto, vol. 4 (Berlin and Weimar: Aufbau, 1978), 64.

25 The idea was developed by Jakob von Uexküll; he considered the life of animals to be bound to their instincts and biological needs. Jakob von Uexküll and Georg Kriszat, *Streifzüge durch die Umwelten von Tieren und Menschen. Ein Bilderbuch unsichtbarer Welten* (Reinbek bei Hamburg: Rowohlt, 1956).

following sections. The second point concerns the understanding of nature. Already in the early modern period, the concept of nature was highly differentiated. It was closely connected with the question of anthropology, also expressed in the works of cosmologists and authors interested in cosmology. In the early modern period, René Descartes's (1596–1650) ideas, above all, gained strong dominance. He postulated the notion that there are strong contrasts between nature (*res extensa*) and spirit (*res cogitans*). The travelers in space faced a bizarre world in which the two substances were mixed, within which it was unclear whether the living beings they encountered were like humans, or whether they had more animal or plant parts (like the dendrites already mentioned above).

The Mechanistic Worldview and the Image of Human Beings

Friedrich Überweg, who studies the history of philosophy, summarized the key developments in the seventeenth century as follows: the great philosophical systems conceived of during that period first developed the general ideal of a universal, mechanistic cohesion of nature. Following the ideas developed by their model René Descartes, other philosophers attempted to determine the relationship between the world of ideas with the mechanistic conditions of nature. They tried to refine that connection by means of mathematical methods, using these to situate that relationship within a physical-scientific context.²⁶

Descartes conceived of the following idea in his *Meditationes de prima philosophia* (1641: *Meditations on the Principles of Philosophy*): There are only two substances in the entire cosmos: the spirit and the body.²⁷ Those are strictly opposed to each other as separate *essences* and do not share any common characteristics. People would be able to develop an anthropology only based on this conflict between the dualism of these opposing substances. Descartes identified human beings collectively as *res cogitans*; hence, as endowed with the ability to imagine the limitless. By contrast, the material existence was the *res extensa*, a matter limited within space.²⁸

26 Friedrich Ueberwegs *Grundriss der Geschichte der Philosophie*. Third vol.: *Die Philosophie der Neuzeit bis zum Ende des achtzehnten Jahrhunderts*, revised by Max Frischeisen-Höhler and Willy Moog (Berlin: E. S. Mittler & Sohn, 1924), 219.

27 Adam Adler, "Die Philosophische Anthropologie des Descartes," *Philosophisches Jahrbuch* 125.1 (2018): 169–80.

28 René Descartes, *Meditationes de prima philosophia*, trad. and ed. Lüder Gäbe (Hamburg: Felix Meiner, 1992), 50 and 54. Hans Jonas emphasized that with Kepler, Galileo and Descartes, the geo-

Since the human being takes a material, corporal form in a body, it can be understood, as in the case of all other organic beings (animals, plants), as an automaton (machine) which God had created within the universe, consisting of a mix of substances.²⁹ For Descartes, the human being consisted of a circulation system, consisting of blood, veins, bones, nerves, and internal organs. The central aspect of this system was, according to his understanding, the life energy, a kind of internal fire that maintained the functions of the organism. That meant that human beings not only enjoy the complete freedom of the spirit but are also completely subjugated under the natural laws.³⁰ That conclusion, in turn, raised the question regarding the differences of life forms. According to Descartes, animals differed from people through the use of language; at the same time, they would follow their instincts only (i.e., through biological mechanisms) without any consciousness. “This shows that animals do not only have less reason than people, but that they do not have any.”³¹

metrization of nature and the mathematization of physics were intended to reveal the true language of nature. The geometrization of nature and the mathematization of physics were intended to reveal the true language of nature. Both sciences offered those mentioned the possibility of finding the key to the mechanical determination of life. Hans Jonas, *Philosophische Untersuchungen und metaphysische Vermutungen* (Frankfurt a. M.: Insel, 1992), 118.

29 Gottfried Wilhelm Leibniz rejected the ideas of Descartes and advocated strict determinism: God has synchronized the soul and the body like two clocks. The concept of pre-stabilized harmony is crucial here. “Les ames agissent selon les loix des causes finales par appetition, fins et moïens. Les corps agissent selon les loix des causes efficientes ou des mouvements. Et les deux regnes, celui des causes efficientes et celui des causes finales son harmoniques entre eux” (Souls work according to the laws of the causes of ends, through delicate desires, ends and means. The bodies work according to the laws of effective causes or movements. And both realms, that of the effecting causes and that of the end causes, harmonize). Gottfried Wilhelm Leibniz, *Monadologie* (Hamburg: Felix Meiner, 1956), 63.

30 This opinion is still held today: “Aktuell ist das Weltbild der Physik streng materialistisch aufgebaut. Demzufolge gleicht das Universum einer gigantischen Maschine, deren Zahnräder in Form von Naturgesetzen den Ablauf bestimmter Prozesse kontrollieren. In der Physik existieren weder Geist noch Sinn noch Bewusstsein – und noch nicht einmal Leben. Dieses Weltbild repräsentiert einen Zeitgeist, der sich vom Gedanken an das ‘Übernatürliche’ abgewandt hat und alles aus einer Maschinenperspektive heraus analysieren will” (Currently, the idea in physical theories is strictly materialistic. Accordingly, the universe resembles a gigantic machine whose cogwheels control the course of certain process in the form of natural laws. In physics, there is neither spirit nor meaning nor consciousness – and not even life. This view represents a Zeitgeist that has turned away from the idea of the ‘supernatural’ and wants to analyze everything from a machine perspective). Gerd Ganteför, *Das rätselhafte Gewebe unserer Wirklichkeit und die Grenzen der Physik* (Frankfurt a. M.: Westend, 2023), 13. On the theory of animals as automata, see Hans Werner Ingensiep and Heike Baranzke, *Das Tier* (Stuttgart: Reclam, 2008), 30–32.

31 René Descartes, *Discours de la méthode* (Hamburg: Felix Meiner, 1960), 95.

Descartes conceived of a complex notion of mechanics (a “philosophical physicalism”).³² After all, through the divine creation, the soul, determined by reason, entered the body. Thus, an intimate connection took place, but not as a merging of the two substances (*res extensa*, *res cogitans*). For Descartes, this dualism is the key component in his anthropology. Moreover, through his thinking ability, the human being has become unchangeable through the combination of body and soul. That means that the idea of human evolution was not compatible with the theory of mechanism.

The crucial metaphor for contemporary philosophers was the clock with its precise operational mechanisms. There were, for instance, astronomical clocks on church towers and city halls, and in palaces and castles which were generally admired as technological miracles, and which were also regarded as aesthetic objects. Sometimes, those mechanisms were equipped with moving animal figures out of metal, mostly roosters, such as the one at the Strasbourg cathedrals (1354) or at the city hall of the Prague Old Town (Orlik, built around 1410).

Idealized animals, that is, natural automatons, triggered the idea of an extreme form of reification of living creatures during the early modern period. One example for this would be the *Canard Digérateur* (i.e., the “Digesting Duck”) created by Jacques de Vaucanson (1709–1782) in 1748. It consisted of more than 400 movable parts, and could wave its wings, could dive, make sounds, and drink water. People could feed the duck. It took grains into its beak, swallowed them, digested them with the help of chemicals into a tube made from natural rubber and released them as pseudo feces.³³ Subsequently, many other types of automatons were developed, complex machines, or simple calculators and computers, efforts carried forward into today through robotics.³⁴ In fact, many post-humanists expect for our

³² Adler, *Descartes* (see note 31), 173: “Descartes completely mechanizes the human body.”

³³ Herbert Heckmann, *Die andere Schöpfung. Geschichte der frühen Automaten in Wirklichkeit und Dichtung* (Frankfurt a. M.: Umschau, 1982), 219. The topic of automata is dealt with in detail for the early modern period in the volume *Technik und Science Fiction in der Vormoderne*, ed. Brigitte Burrichter and Dorothea Klein (Würzburg: Königshausen & Neumann, 2018); see also E. R. Truitt, *Medieval Robots; Mechanism, Nature, and Art* (Philadelphia, PA: Pennsylvania Press, 2015). Editor’s note: The earliest examples of robots in Middle Ages appear to be the mechanical giants in Der Stricker’s *Daniel von dem Blühenden Tal* (ca. 1230); cf. Albrecht Classen, “Assassins, the Crusades, and the Old Man from the Mountains in Medieval Literature: With an Emphasis on The Stricker’s *Daniel von dem Blühenden Tal*,” *Marginal Figures in the Global Middle Ages and the Renaissance*, ed. Meg Lota Brown. Arizona Studies in the Middle Ages and the Renaissance, 47 (Turnhout: Brepols, 2021), 123–40.

³⁴ Wilhelm Schickard’s and Blaise Pascal’s calculating machines from 1623/1645 come to mind, as do Leibniz’s machine with staggered rollers and sprocket wheels (1671). Friedrich Klemm, *Ge-*

immediate future the creation of cyborgs, hybrid beings consisting of human and animal parts, conjoined with mechanical elements.³⁵

As Julien Offray de La Mettrie wrote in the treatise, *The Human Being as a Machine* (1747): “Ziehen wir also den kühnen Schluss, dass der Mensch eine Maschine ist und dass es im ganzen Weltall nur eine Substanz gibt, die freilich verschieden modifiziert ist” (Let us reach the bold conclusion that the human being is a machine and that there is only one substance in the entire cosmos which is, however, modified many times).³⁶ The French materialist praised Descartes but rejected the idea that there existed any substance within the spirit. According to him, Descartes was the first to have shown that animals are nothing but machines.³⁷ The human beings differ from animals through our upright gait, our abilities to think and feel, and our capacity to differentiate good from evil based on our materially developed intelligence and moral instincts.

Such a notion opened the path toward the physicalism of modern neuropsychology and a functional medicine as it emerged only then. Descartes’s theories blazed the trail to recognize the world as God’s creation, which occurred on a natural-scientific and mechanistic basis. That thought also comprised many aspects of a pre-modern anthropology. By means of this new notion of nature and hence a new conception of the cosmos with its biosphere, Descartes transformed the concept of anthropology. This transformation, as indicated, will next be studied in two other areas, that is, the new cosmology (i.e., as in scientific narratives of inhabited worlds in outer space) and then in early modern literature which produces comparably kinds of fantastic stories. The following sections describe the ideas of individual authors. The changing views and explanation of (cosmic) natures and their relation to anthropology are then acknowledged in the final section.

schichte der Technik. Der Mensch und seine Erfindungen im Bereich des Abendlandes (Hamburg: Rowohlt, 1983), 104–05.

³⁵ Donna Haraway, *A Cyborg Manifesto. Science, Technology, and Socialist-Feminism in the Late Twentieth Century* (London: Routledge, 2018); online at: www.Warwick.ac.uk/fac/arts/english/currentstudents/undergraduate/modules/fictionnownarrativemediaandtheoryinthe21stcentury/manifestly_haraway_a_cyborg_manifesto_science_technology_and_socialist-feminism_in_the_pdf (last accessed on Aug. 30, 2023). German Edition: *Ein Manifest für Cyborgs, Die Neuerfindung der Natur: Primaten, Cyborgs und Frauen* (Frankfurt a. M. and New York: Campus, 1991), 33–72.

³⁶ Julien Offray de La Mettrie, *Der Mensch eine Maschine*, trad. Theodor Lücke (1747; Stuttgart: Reclam, 2001), 94.

³⁷ La Mettrie, *Der Mensch* (see note 36), 85.

New Cosmologies in the Early Modern Period

The natural scientists in the early modern period were mostly responsible for the emergence of a transformed understanding of the idea of outer space and thus prompted a revolution in the world of sciences. This innovative type of thinking was made possible not only through new theories and mathematical calculations, but also through the many technical innovations (i.e., the telescope, microscope, thermometer, barometer, hydrometer, precise clocks, air pumps to create a vacuum, and many others).³⁸ Particularly the experimental use of the vacuum pump (1664) served for the confirmation of the idea by ancient atomists and Epicureans that there must exist a space in the cosmos without air. This realization justified the abandonment of the Aristotelian idea of space filled with ether.³⁹ At the same time, a new foundation was established for the development of a scientific globalization: the new measuring techniques and measuring units were gradually accepted globally, that is, universally binding measuring units were defined that could be used to set new data collection standards for many technologies and economics.⁴⁰

The use of telescopes was especially important. Tycho Brahe (1546–1601) built the first observatory (1576); the Dutchman Hans Lippershey (1570–1619) developed an early telescope with a three-fold magnification; Galileo Galilei gazed through a telescope toward Jupiter with a magnification factor of 33, and he saw that four moons circled around the planet. Giovanni D. Cassini (1625–1712) had available since 1670 the powerful telescope by the famous lens grinder Guiseppe Campini from Rome that allowed him to discern earthly disturbances of the atmo-

38 Günter Bayerl, *Technik in Mittelalter und Früher Neuzeit* (Stuttgart: Theiss, 2013); Klemm, *Geschichte* (see note 34), 61–140; Ulrich Troitzsch and Wolfhard Weber, *Die Technik. Von den Anfängen bis zur Gegenwart* (Stuttgart: Unipart, 1987); Engelhard Weigl, *Instrumente der Neuzeit: Die Entdeckung der modernen Wirklichkeit* (Stuttgart: Metzler, 1990).

39 “Die Wissenschaft der Frühen Neuzeit war noch stark von antiken Traditionen geprägt. Die Meinung des Aristoteles [. . .] war im Mittelalter und der Renaissance vorherrschend. Erst schrittweise wurden antike und besonders aristotelische Ideen überwunden” [Science in the early modern period was still strongly influenced by ancient traditions. The opinion of Aristotle [. . .] was predominant in the Middle Ages and the Renaissance. Only gradually were ancient and especially Aristotelian ideas overcome]. Gudrun Wolfschmidt, “Die Eroberung des Himmels,” *Macht des Wissens: Die Entstehung der modernen Wissensgesellschaft*, ed. Richard van Dülmen and Sina Rauschenbach, (Cologne, Weimar, and Vienna: Böhlau, 2004), 187–212; here 187. The ancient and medieval world already knew automata, but not complex calculating machines. Peter James and Nick Thorpe, *Keilschrift, Kompass, Kaugummi: Eine Enzyklopädie der frühen Erfindungen* (Munich: Deutscher Taschenbuch Verlag, 2002), 117–38.

40 Piero Martin, *Maß für Maß: Die sieben Einheiten, die unsere Welt erklären* (Berlin: Aufbau Verlag, 2022).

sphere. Isaac Newton (1643–1727) constructed the first mirror telescope in 1668.⁴¹ Gravitational forces were also calculated, which then meant that every living being on Earth and on alien planets was apparently obeying the laws of gravity. No author, be he scientist or writer, could any longer ignore the laws of nature in his or her descriptions from that moment on.⁴²

Descartes offered an additional contribution to empiricism as determined by logic and rationality by developing the thesis that mathematics could provide certitude for scientific epistemology. Thus, adherence to the beliefs of ancient and medieval cosmology was finally overcome for good. The new aspect of this view, however, concerns the anthropological question of which logical or even empirical arguments could be used to speak of alien worlds if these worlds were actually inhabited. The key question was now what kind of living creatures might exist in those alien worlds.⁴³

Relevant for this critical aspect were three major thinkers of the early modern age, Galileo Galilei, Johannes Kepler (1571–1630), and John Wilkins (1614–1672). Each studied the geology/geography of distant planets, theorized about the

41 Alice Collins, Sam Kennedy and Kate Taylor, *Das Astronomiebuch* (Munich: Dorling-Kindersley, 2018), 42–43. From a cultural-historical point of view, see: Erhard Oeser, *Die Suche nach der zweiten Erde: Illusion und Wirklichkeit der Weltraumforschung* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2009), 69–75.

42 In his *Philosophia Naturalis Principia Mathematica* (London: Josephi Streater, 1687) Isaac Newton described the universal laws of gravitation, the interaction of masses in the universe. He believed that mass, time and distances were neutral for the calculations. For him, mass was a physical property of bodies. (Albert Einstein would later reinterpret this assumption.) The pioneers were Giovanni Alfonso Borelli (1608–1679) and Ismael Bullialdus (1605–1694), who attributed an independent force of attraction to the sun. Kepler had established that there is a correlation between the orbital period of a planet and its distance from the sun. As early as 1670, Robert Hooke (1635–1703) calculated that gravity acts on all celestial bodies and that the strength of gravity depends on the distance. Kepler had established that there is a correlation between the orbital period of a planet and its distance from the sun. *Das Physik-Buch*, ed. Jonathan Metcalf et al. (Munich: Dorling Kindersley, 2020), 48–51.

43 Today, the question is examined using an Earth Similarity Index: On the ESI Scale, there are exoplanets that are very alien to Earth, but also those that must be very similar to it. Aleksandar Janjic, *Lebensraum Universum. Einführung in die Exoökologie* (Berlin: Springer, 2017), 10; Bernhard Mackowiak, *Die Erforschung der Exoplaneten. Auf der Suche nach den Schwesterwelten des Sonnensystems* (Stuttgart: Franckh Kosmos, 2015), 144; Arik Kershenbaum, *The Zoologist's Guide to the Galaxy*, trad. Dirk Höfer (New York: Viking-Penguin, 2020). German edition: *Ein Naturführer durch den Kosmos. Was terrestrische Tiere über Außerirdische verraten – und über uns selbst* (Berlin: Matthes & Seitz, 2023), 59. Within a few years, astrobiology might contribute to a changed, evolutionary anthropology altogether.

flora and fauna that could be found there, and envisioned the aliens who might make contact with space travelers.

Galilei shared his observations about the moons circling around Jupiter in his first treatise, *Sidereus Nuncius* (1610). He also studied and precisely described the Earth's satellite, the moon. His observations and moon-maps showed that there was no smooth and flat surface; on the contrary, it was rough and uneven, characterized by valleys and mountains.⁴⁴ Moreover, he argued that the moon possessed a distinct atmosphere. For Galilei, this meant that the moon could be regarded as a second earth, and that hence the earth was a planet among many others. In his volume, *Dialogo di Galileo Galilei sopra le due Massimi Sistemi del Mondo Tolemaico e Copernicano* (i.e., *Dialogue about the Two Main World Systems, the Ptolemaic and the Copernican*) (1622/1891), he addressed the question whether the moon was livable: "If anyone were to raise the question whether the same or other creatures than here on Earth are produced there, asking for my response in emotional and healthy rational terms, I would claim that those would be entirely different, and this so much that we could not even imagine it. Only that seems to me to be adequate for the wealth of nature and the omnipotence of the Creator and Guide."⁴⁵ Such considerations could not be confirmed by purely scientific methods, so requiring that the author had to rely on his imagination and theological speculations.

Johannes Kepler noted in response to Galilei's comment in his treatise *Dissertatio cum Nuncio Sidereo* (1610): "If you create ships and sails fitting for the air in outer space, then there will also be people who will not shy away from the vastness of space."⁴⁶ Through the use of telescopes it would be possible to discover ever more numbers of stars in the outer space.⁴⁷ It could be assumed that most of those would be habitable.

44 Galileo Galilei, *Sidereus Nuncius. Nachricht von neuen Sternen*, ed. Hans Blumenberg (Frankfurt a. M.: Suhrkamp, 1980), 83. First edition: Venice: Thomas Baglio, 1610.

45 Galilei, *Sidereus* (see note 44), 154. The English edition is a translation from the German.

46 Johannes Kepler, *Dissertatio cum Nuncio Sidereo* (Florence: Io. Antonium Caneum, 1610). Quoted from F. Schmeidler, "Zum vierhundertsten Geburtstag von Johannes Kepler," *Mitteilungen der Astronomischen Gesellschaft* 30 (1971): 7–14; here 11. The full version of the book was published posthumously in the year 1634.

47 "[. . .] und wir wissen sicher, dass dieser Raum als Wirkung und Erzeugnis einer unendlichen Ursache und eines unendlichen Prinzips auf unendliche Weise unendlich sein muss." [. . . and we know for certain that this space, as the effect and product of an infinite cause and an infinite principle, must be infinite in an infinite way.] Giordano Bruno, *Das Aschermittwochsmahl*, ed. Ferdinand Fellmann (Frankfurt a. M.: Insel, 1981), 153 (first edition: *La cena de le ceneri* [London: John Charlewood, 1584]) On this detail, see Alexandre Koyré, *Von der geschlossenen Welt zum un-*

In his youth when he studied at the Tübingen Stift – school of advanced learning – Kepler had been an avid reader of the narratives by Lucian of Samosata (d. after 180 C.E.).⁴⁸ And he was fascinated by the Pythagorean teachings. According to Kepler, Plato and Pythagoras agreed that the cosmos could be explained in mathematical terms. For Kepler, the creation of the world had been based on perfect numbers.

Kepler wrote the first version of his *Somnium, seu opus posthumum sive astronomia lunaris* in 1608 or 1609. Some scholars consider this book a predecessor of modern science-fiction.⁴⁹ The volume consists of three sections. In the first, Kepler, in his dream, reads in a book; in the second, we learn the story of Duracotus and Fiolxhilde in Iceland; in the third, the demon from Leviania reports about life on the Moon and takes Duracotus with him on a journey.

The people in Leviania possess the ability to travel quickly to the Earth; the opposite journey, by contrast, would be very difficult for the people here on Earth. Hence, several spirits formed a team that transported Duracotus into outer space. Before the journey, he was put into a coma by means of opiates because the flight was dangerous and unhealthy and because any human being on that journey would quickly be suffering from shortness of breath and hypothermia. Duracotus's body was rolled up like a spider and transported in that way through space.

Living on the planet Leviania, separated into two hemispheres, were the Subvolves and the Privolves. Although time there was divided between day and night, the physical time on that planet was very different from that on Earth. While the Subvolves constantly lived in their villages, cities, and gardens, the Pri-

endlichen Universum (Frankfurt a. M.: Suhrkamp, 1980). Bruno's assumptions were gradually confirmed when many "nebulae" were discovered in space during the seventeenth century: Simon Marius (1527–1637) from Ansbach described the Andromeda Nebula in 1612 and Johann Baptist Cysat (1587–1657) from Ingolstadt described the Orion Nebula in 1618. Both nebulae were regarded as parts of our static galaxy. Around 1700 about 20 nebulae were known, around 1800 about 2000. Wolfshmidt, "Die Eroberung" (see note 39), 187–212. The discovery of strange galaxies, in this case the neighboring galaxy Andromeda, was first made by Edwin Hubble in 1924. The Milky Way was now just one of truly many other galaxies that were moving through the cosmos. Since Hubble found a redshift in most of the calculated galaxies, which showed that they were moving away from the Milky Way, the picture or cosmology that had prevailed from the early modern period until 1942 changed radically. As we know now, there is no static universe, only an expanding universe. According to the law of gravity, our Earth in its solar system is drifting with its solar system, its galaxy, and its cluster of galaxies together with neighboring galaxies toward the Great Wall in the distant universe.

⁴⁸ Beatrix Langner, "Das Kugelspiel. Ein Leitfaden für Mondreisende," Johannes Kepler, *Der Traum, oder: Mond-Astronomie. Somnium sive Astronomia lunaris*, ed. Beatrix Langner (Berlin: Matthes und Seitz, 2021), 153 (first edition by Ludwig Keppler, Frankfurt, a. M.: Sagan, 1634).

⁴⁹ Thomas P. Weber, *Science Fiction* (Frankfurt a. M.: Fischer, 2005), 7.

volves roamed deserts and forests like nomads. The animals were covered by thick fur, and the plants by thick bark. Additionally, “the species of snakes was omnipresent,”⁵⁰ but we are not told any more about those reptiles.

In a geographical appendix, Kepler reports about the construction of cities on the moon. There he called the inhabitants “Endymionides” because their ruler, Endymion, was Selene’s lover.⁵¹ They erected walls around the cities, and the ditches below were later supposed to fill with water to allow traveling by ship. The walls also served as passageways. Unfortunately for the narrator, a loud dint in the street ended the dream so that the narrative remained a fragment.

John Wilkins, bishop and secretary of the Royal Society, is well known among modern scholars for his linguistic research (*Essay Toward a Real Character and a Philosophical Language* (London: Printed for Sa. Gellibrand and for John Martyn, 1668). He also wrote a defense of the teachings by Galilei and Kepler.⁵² In the volume on the discovery of a new world, *The Discovery of a World in the Moone*, we can presume his affinity with Godwin’s work.

Wilkins presented his research report about the scientific theses concerning the Moon in thirteen chapters. He insisted, however, that it was not a scientific treatise, but an account that he had written during his free time. The author extensively summarized the history of research in antiquity and by the early Church Fathers concerning outer space. Above all, he considered that the possibility of a multitude of worlds in the cosmos would not contradict scientific nor theological hypotheses, neither with respect to reason nor Christian religion.

For him, it was clearly proven “that the Moon is a solid, compacted opacous body.”⁵³ It would not be a sun, but similar to Earth (“terrestrial”).⁵⁴ There would be many geological features, such as high mountains, deep valleys, broad plains, large oceans. There would even be an atmosphere on the Moon, and a change of the seasons. In the last section, Wilkins traced the question of whether there might be living creatures on the Moon, and if so, what kind they might be. However, since a traveler from Earth would have to cross empty space to reach the Moon, the answer to this question would have to remain rather vague: “[. . .] be-

50 Kepler/Langner, *Das Kugelspiel* (see note 48), 26.

51 Kepler/Langner, *Das Kugelspiel* (see note 48), 103.

52 John Wilkins, *The Discovery of a World in the Moone, or, a Discourse tending to prove that ,tis probable there may be another habitable World in that Planet* (London: Michael Sparke and Edward Forrest 1638), 47. Johannis Wilkins, *Des fürtrefflichen Englischen Bischoffs zu Chester Vertheidigter Copernicus, Oder Curioser und gründlicher Beweiß der Copernicanischen Grundsätze* [. . .], ed. Johann Gabriel Doppelmayr (Leipzig: Peter Conrad Monath, 1713).

53 Wilkins, *The Discovery* (see note 52), 146 (proposition 4).

54 Wilkins, *The Discovery* (see note 52), 62.

cause I know not any ground whereon to build any probable opinion. But I thinke that future ages will discover more [. . .].”⁵⁵

Several major paradigm shifts had taken place at that time: the telescope facilitated a better view of the Moon and showed more of its objective appearance. The invisible in cosmos became partially visible. Kepler used the natural sciences and especially geometry to present his new understanding of the Moon. In his notes to the *Somnium*, he offered lengthy explanation about how he could conceive of his imaginary projection. For him, poetry and science, observation and theory formed one unit. That unity, in turn, was based on divine perfection and the overall harmony of the cosmos. But the crucial step forward was that the position of human beings in space had changed. To illustrate this, I will next introduce several authors from the early modern period who had investigated a cosmos that was inhabited by living creatures.

Francis Godwin

In contrast to his predecessors, Francis Godwin (1562–1617) contradicted the approach to think within categories of mechanisms. Instead, he created a new model of space populated by aliens and phantastic animals. Godwin served as a bishop in the Anglican Church. The novel, *The Man in the Moone: or a Discourse of a Voyage thither by Domingo Gonsales*, was probably completed in 1617, as it refers to major events from before that year, such as the report about China by the Jesuit by Matteo Ricci (1552–1602). The editor of the German-language version, Klaus Völker, however, supposes that that Godwin’s work was not completed until 1627 because it appeared only posthumously in 1638. As his editor notes, with this novel Godwin established a paradigm for similar texts about the travel to the outer space, and he also inspired depictions of numerous Robinson Crusoe-novels and political utopias. His travel narrative appeared in at least twenty-five editions in four languages between 1638 and 1768.⁵⁶ The reason why his *Man in the Moone* novel had not been published earlier was because the author had publicly advocated the new Copernican worldview, which was dangerous at that

⁵⁵ Wilkins, *The Discovery* (see note 52), 142.

⁵⁶ Klaus Völker, “Nachwort,” Francis Godwin, *Der Mann im Mond, oder Der Bericht einer Reise dorthin von Domingo Gonsales dem rasenden Botschafter*, ed. Klaus Völker (Frankfurt a. M.: Ullstein, 1986), 82.

time.⁵⁷ In responding to that controversy, he wrote that “but to attribute unto these celestiall bodies contray motions at once, was a very absurd conceit, and much more, to imagine that same Orbe wherein the fixed stars are, (whose naturall course taketh so many thousands of yeares) should every 24 howers be turned about. I will not go so farre as Copernicus, that maketh the Sunne the Center of the Earth his motion [. . .] and these absurdities are quite taken away [. . .]” (30).⁵⁸

In addition, the author distanced himself from his own work by setting up a fictional Spanish narrator: “To the Ingenious Reader. Thou hast here an essay of Fancy, where Invention is shewed with Judgment. It was not the Authors intention (I presume) to discourse thee into a beleife of each particular circumstance” (1). According to his claim, Domingo Gonsales, born in Sevilla in 1552, had composed the account. After many adventures that were presented in the style of a picaresque novel, Gonsales was depicted as having traveled to the moon and so promised his readers an extensive report about his flight into the outer space.

During a mercantile voyage the Spaniard was supposedly dropped off by force at a paradisiacal but lonely island. There he occupied himself with the domestication of animals, especially birds. Geese transported goods for him after he had gotten them accustomed to flying together in a yoke. A sailing ship that passed by rescued him, and it also took on the domesticated animals. As the story proceeds, after a shipwreck the geese brought Gonsales to safety by transporting him to Tenerife. However, because the barbaric indigenous tried to kill the protagonist, he climbed in the last minute into his flying machine that he had finished building only just before his attack; he then ordered the geese to fly, and thus rose up into the sky with their help.

However, the geese immediately flew straight up into the sky to the sphere beyond the clouds. Gradually, they turned to a smooth glide flight and hardly moved their wings. They had, as Gonsales realized, overcome the effect of earthly gravity. The speed with which they moved forward stunned him. During the flight he encountered phantoms who talked to him alternatively in Italian, Dutch, and Spanish. At this point, we can recognize the narrative strategy which Godwin pursued with his novel. On the one hand, he resorted to satire; on the other, he relied on fantasy, and he combined both closely with Copernican insights. The geese aimed directly for the moon. The space traveler observed that the earthly globe

57 Sarah Hutton, “The Man in the Moone and the New Astronomy: Godwin, Gilbert, Kepler,” *Etudes Epistémè* 7 (2005), online at: <https://journals.openedition.org/episteme/2815> (last accessed on Jan. 4, 2024).

58 Francis Godwin, *The Man in the Moone: or a Discourse of a Voyage thither by Domingo Gonsales* (London: John Norton, 1638). Francis Godwin, *The Man in the Moon: Or A Discourse of a Voyager Thither by Domingo Gonsales*. Republished (Warsaw: Didcot House, 2017).

became smaller and thus realized that he had carried out an independent journey. The journey to the moon took eleven days.

Looking down on the moon, Gonsales saw a large ocean, islands, and a continent. Then the geese landed. The first surprising impression was:

Their trees are at least three times so high as ours, and more than five times the breadth and thickness. So their herbes, Beasts and Birds; although to compare them with ours I know not well how, because I found not any thing there, any species either of Beast or Bird that resembleth ours any thing at all, except Swallowes, Nightingales, Cuckooes, Woodcockes, Batts, and some kindes of wild Fowle, as also o such Birds as my Gansa's all which, (as now I well perceived,) spend the time of their absence for us, even there in that world [. . .] (34).

The earthly geese flew toward a bush that had leaves that allowed themselves and also Gonsales to satisfy their hunger:

Scarcely had I ended this banquet, when upon the sudden I saw my selfe environed with a kind of people most strange, both for their feature, demeanure, and apparell. Their stature was most divers, but for the most part, twice the height of ours: their colour and countenance most pleasing, and their habit such, as I know not how to expresse (43).

Their skin color (“lunar-colored”) could not be compared with any pigments on earth. Interestingly, the moon people could fly with the help of fans. Hardly had Gonsales uttered the words, “Jesus, Maria,” when those people genuflected, and then they hugged the human space traveler. One of them took his hand and led him to a splendid building, a palace owned by the prince of that land. According to their ancient traditions, the ruler came from earth and had married the female ruler of the moon – the mythical story of Endymion and Luna. The communication between the space traveler and the monarch at first worked with the help of simple gestures since the sounds and the scripture of moon inhabitants could not be expressed in an earthly language. The strangers soon expressed their thoughts in melodies with unusual sounds and without words. To explain this exchange, Gonsales jotted two statements in musical notes for his report.

Having arrived in the palace, Gonsales uttered some verses in praise of God. The Lunarians responded with great respect: “. . . the reason whereof I learned to bee, that Martin in their language signifieth God” (43). Soon enough, Gonsales felt as if he had arrived in a second paradise. There was no shortage of food or essential items necessary for life. The women in that lunar community were of extraordinary beauty. By their nature, the Lunarians hated all kinds of moral shortcomings and lived in peace, friendship, and love with each other. Children anticipated to be evil and demonstrating imperfect character were sent to the earth. However, the moon voyager notices one small vice

among the Lunarians. They smoked large amounts of tobacco. Weather was also paradisiacal. There was no wind, no rain, no change of the air, no hot Summer or cold Winter; there was only eternally temperate Spring.

Some of the ruling Lunarian owned slaves who were kept like wild animals (40). The inhabitants of the moon were divided into two groups according to the geographical distribution and their sizes. As Gonsales commented, that distinction was due to the natural conditions of the moon because the smaller-sized inhabitants, as well as the space voyager himself, had to sleep under changed light conditions.

Because his longing for his family back on earth grew tremendously after his long sojourn there, and since the geese, which he fed every day, also looked down rather sorrowfully because they missed their usual flights, Gonsales prepared his machine and returned to Earth. Having arrived in weightlessness, he let loose the reins, so the birds landed safely on Earth.

Aphra Behn, Baltasar Venator, and Saverien Cyrano de Bergerac

Three authors quickly responded to Francis Godwin's report of the voyage to the moon. First, there was Aphra Behn (1640–1689), who lived in London and became famous for her novel *Oroonoko or, The Royal Slave* (1688), which has proven highly popular in modern feminist literary criticism. Less familiar, however, though still of great importance for the present study, was her farce *The Emperor of the Moon* that had appeared one year earlier (1687) and was performed in the Dorset Garden Theatre in London. As she noted in her prologue, she tried to invest her piece with plausibility and naturalness.⁵⁹ The play's narrative is driven by people from the Earth and from the Moon who are caught in complicated love affairs. Doctor Baliardo, father of two love-driven daughters, is filled with desire to know more of the moon. He relies heavily on books such as Lucianus's and Godwin's travelogues and busily collects treatises on the inhabitants of the moon. Developed in the style of William Shakespeare's play *A Mid Summer's Night Dream*, at the end all couples can realize their dreams and the doctor is healed from his addiction to the moon, abandons his Kabbalistic foolishness, and is

⁵⁹ Aphra Behn, "The Emperor of Moon," eadem, *The Plays, Histories, and Novels of the Ingenious MRS Aphra Behn, with Life and Memories*, vol. 4 (London: John Pearson, 1871), 189–256, 190. German edition: Aphra Behn, *Fliegen sollst du. Gedichte und Dramen*, ed. Tobias Schwartz, vol. 2 (Berlin: AvivA, 2021); Behn, *Plays*, 228.

purged of his Rosicrucian ideas. It is interesting to note that Kepler and Galilei appear as inhabitants of the Moon and offer descriptions of its nature. Aphra Behn seems to have been one of the few women in the seventeenth century who engaged with contemporary cosmology.

The satirist Balthasar Venator (1594–1664) published an amusing description of the moon in his volume *Kurtze und kurtzweilige Beschreibung der zu vorn unerhörten Reise welche H. Bilgram von Hohenwandern ohnlängsten in die Neue Oberwelt des Monts gethan* (1660).⁶⁰ Bilgram reports that one evening he accidentally ran into a wall, which caused him a dizziness that made him see stars in front of his inner eyes and thus perceive the end of the world, but he also understood that there was a huge number of fools living here on Earth. As he emphasizes, it was not Lucianus who served as a model for his apocalyptic vision. Instead, he intended to present the full truth of what he as a traveler had seen with his own eyes.

He then states that the Moon, which many observers regarded as nothing but a yellow lantern in the sky, was a cultivated country with cities, villages, palaces, mountains, vineyards, valleys, fields, and meadows.⁶¹ Especially the dark moon area had given cause to assume that from early on.

When he had arrived at the border city of Hellmond at the time of the full moon, he was approached by a native who greeted him in Latin. Both entered an inn located nearby where Bilgram was thoroughly interviewed. The traveler reported in detail about the conditions in Germany and the war and explained that he had come from the region of Mainz. The next morning, Selenius, the Latin speaker, took Bilgram for a walk, and there they encountered a cleric who was interested in the development of religion on Earth. Afterwards, they reached the court of the ruler of the Moon. The king there was interested in the condition of the governments on Earth. At night, having briefly stepped outside, the visitor saw not only the silvery mountains of the Moon, but even the roofs of the house were covered with silver. On his walk, Bilgram never saw any women since they all stayed at home. Unfortunately, the stay ended quickly; the dreamer fled from the planet, jumped through a window and landed softly on the Earth in his bed,

⁶⁰ Balthasar Venator, *Kurtze und kurtzweilige Beschreibung der zu vorn unerhörten Reise welche H. Bilgram von Hohenwandern ohnlängsten in die Neue Oberwelt des Monts gethan* (Frankfurt a. M.: without specification of the publisher, 1660). Online: https://books.google.com/books?id=dsxcAAAcAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false (last accessed on Aug. 31, 2023).

⁶¹ Venator, *Kurtze Beschreibung* (see note 60), 4.

“on the same side he had slept on the day before.”⁶² Venator showed a rich knowledge of tales of lunar journeys, was strongly interested in anthropology, less in nature per se.

Hector Savinien Cyrano de Bergerac (1619–1655) commanded solid knowledge of contemporary philosophy and natural sciences. Under the direction of Pierre Gassendi (1592–1655), he studied the works by Descartes and the natural scientific treatises by Galilei and Kepler.⁶³ The first part of the novel *Mondstaaten und Sonnenreiche* was composed probably in 1642, the second part remained fragmentary.⁶⁴ Both narratives appeared posthumously in 1657 and 1662, respectively.

Bergerac began with a confession: “I believe that the moon is a world like our own” (19). The hero of the story made his first attempt to fly by filling a few bottles with morning dew, lifting off and landing in Canada. Later he attempted a flight to the moon, first with the help of rockets, then with his miraculous dew-filled bottles. Having landed on the moon, the protagonist found himself in a sort of extraterrestrial paradise. At first, he encountered alien animals and plants, then human-like beings who knew his language. These beings introduced themselves as characters from the Old Testament, who at the ancient biblical period had been able to travel into the outer space.

However, after the traveler had eaten a fruit of the biblical apple tree growing on the Moon, he found himself transferred into another part of the moon. Quadrupedal aliens dragged him to a city on the moon, and then handed him over to an acrobat who trained him as a clown. During his performance at an amusement park, he made acquaintance with a demon who was not an inhabitant of the Moon or the Earth, but instead a fiery sun world more fitting for his demonic status (53).⁶⁵

Ich fragte ihn, ob sie Körper seien wie wir; er sagte ja, sie seien Körper, aber nicht so wie wir, noch wie irgendetwas, das wir dafür hielten, weil wir Körper gewöhnlich nur das nannten, was man berühren könne. Im übrigen gäbe es in der Natur nichts, das nicht stofflich sei, und obwohl sie dies selber seien, müssten sie doch, wenn sie uns sichtbar werden

⁶² Venator, *Kurtze Beschreibung* (see note 60), 71.

⁶³ Cyrano de Bergerac, *Mondstaaten und Sonnenreiche* (Munich: Wilhelm Heyne, 1986), 26, 243. The quotation is based on this edition; it contains many passages that are present in the Paris and Munich manuscripts but are missing in all editions to date. (First edition: Cyrano de Bergerac, *Les États et Empires de la Lune* (posthumously, 1657), *Les États et Empires du Soleil* (posthumously 1662). Cyrano de Bergerac, *L'autre monde ou les états et empires de la lune et du soleil*, nouvelle édition par Frédéric Lachève (Paris: Librairie Carnier Frères, 1932), 5–190.

⁶⁴ The text was revised by de Bergerac's sister, the nun Katherine, and the theologian Henri Le Bret. Hans Eckart Rübesamen, “Einleitung,” *Die Mondstaaten* (see note 63), 11.

⁶⁵ This was a reference to the utopia *La Città del Sole* (1602) by Tommaso Campanella.

wollten, Körper annehmen, die dem entspräche, was unsere Sinne wahrzunehmen imstande seien. (54).

[I asked him whether they had bodies like us; he responded, yes, they had bodies, but not like us, or like anything what we considered as such because we would normally call a body what one can touch. Moreover, there is nothing in nature that is not material, and although they are material themselves, if they wanted to become visible to us, they would have to take on bodies that correspond to what our senses are capable of perceiving.]

These beings imbibed their nourishment as steam entering their noses; that intake would not result in any smelling excrements, but rather deriving from plant consisting of petals from oranges, jasmines, and clover. The traveler identified their language as a kind of music without words. He learned it quickly and could soon philosophize with the inhabitants of the city. However, those residents embraced weird, contradictory, or completely absurd opinions, propagated in their priests' sermons in form of a sensualist atheism (78).⁶⁶ They all lived in an abstruse world.

The construction of differences is interesting. Soon, the court society of the town palace assumed that the traveler to the moon must have been a female. The hero was imprisoned with a captured Spaniard, a figure like Gonsales in Godwin's text, who was thought to be male. But the hope that the two men would have offspring was understandably not fulfilled. The question whether those two-legged creatures possessed reason was discussed during the remaining time the protagonist stayed on the moon. Lunar society remained divided over this opinion to the end. They concluded logically that birds also only had two legs, so they decided to identify the traveler as a bird; If classified as an animal, the hero would only follow his instincts and have no reason, but also would not be able to understand the cosmos and the moon with its inhabitants.

With the help of a demon, who suddenly appeared, the moon traveler was able to escape from the prison. Later he lived in the house of a demon that was run by the demon's son. He was a stubborn being who indulged in sensual pleasures to excessive degrees. Since the debates with the lord of the house often touched on topics of physics and cosmology, the participants quickly found themselves in a dialogic labyrinth of inexplicable issues (101). The conversations led soon to a debate about the wandering of souls of all creatures. When they approached the topic of 'miracles,' the philosophers of the moon had different opinions, and this also applied to the question whether there exists a God. Suddenly during one of these discussions a small black figure appeared, snapped up the host, and attempted to escape with him through the chimney. The moon-rider tried to hold them back, but the mysterious figure escaped and the host was dragged away as well. In the next

66 Bergerac also understood sensualism in sexual terms, including in the form of free love.

moment when he shouted in shock “Jesus Maria,” he fell onto a bush in the heather pasture and thus had returned to Earth (125). Before his unexpected departure, the demon had given him a book entitled *The States and Kingdoms of the Sun* (108). This book was supposed to contain many references to the second volume of the story of the journey to distant planets and the sun.

In the continuation of the story, the moon traveler reported how he flew to the many wonderful worlds of the sun-system with the help of a simple rocket powered by a concave mirror. After a flight of four months, the traveler landed on a little solar planet that was located near the sun. The first inhabitant whom he encountered looked like a naked man who, sitting on a rock, seemed to philosophize. That humanoid creature used, as was explained, a universal language that even the animals could understand. The alien, he said, was waiting for his brothers to be born from the mud of the planet. Fearing this development, the traveler hurriedly located his rocket and was soon flying away.

During the subsequent journey he became as translucent as a crystal. Trusting in the universal validity of the laws of nature, he hoped for a good landing. The ground of the next planetary destination glowed like snowflakes in the sunlight (180). After two weeks of walking on foot through the glistening landscape he reached a dark place in a barren landscape. Exhausted from his travels, he sank down underneath a living being like a tree that looked like a cedar but had a golden trunk. From this strange alien tree arose, first in the form of a ball. Soon, after another metamorphosis, a creature emerged that at first consisted of many small balls. In the course of time these components joined to form human body parts. In the end, a figure that looked like a human stood in front of him. The alien who had emerged from this process began a friendly conversation in a native language with the space traveler which he could understand immediately “Wir sind es, die ihr in der Welt der Erde Geister nennt” (101). [We are what you on Earth call spirits]. During his subsequent wanderings the space traveler saw many other wonderful things on that magical solar planet.

The aliens of the sun could also transform into birds, as they were formed not only spirits but also of matter. Later, the tree-man transformed into a nightingale, which led the moon traveler into the realm of birds.⁶⁷ A particularly colorful bird, a phoenix, i.e., a hermaphrodite, explained that he himself, like humans,

67 Interesting parallels to the ancient author Aristophanes are only briefly mentioned here. Aristophanes, “Die Vögel,” id., *Sämtliche Komödien*, ed. Hans-Joachim Newiger (Munich: Deutscher Taschenbuchverlag, 1976), 289–360. Two Athenians, dissatisfied with the political situation, are invited by a hoopoe to come to the realm of birds. The birds that live there rob the gods of the human offerings and seek to gain control of the whole existing cosmos. In the end, the Athenians take control of the celestial Olympus and the city of the birds in the clouds.

commanded a good language and good logical thinking skills. Many birds, as the alien explained, also like to fly to the countries of the sun from all kinds of planets.

In the end, those birds, living on the sun, behaved like humans but occupied their own planet. They accused the traveler of nonsensical crimes: he would appear to be an unreasonable animal that would claim to have reason or even to be a human being. The hero was arrested and dragged before a tribunal of birds. The partridges acted as the prosecuting attorneys:

Ich meinerseits sehe darin, ob es das [ein Mensch – R.M.] ist, gar keine Streitfrage, ersten weil es sich erdreistet zu lügen, indem es behauptet, kein Mensch zu sein; zweitens weil es lacht wie ein Verrückter; drittens weil es heult wie ein Dummkopf; viertens weil es sich schneuzt wie ein Ekel; fünftens weil es befiedert ist wie ein Rädiger; sechstens, weil es den Schwanz vorne trägt; siebtens weil es immer eine Anzahl kleiner Steinchen im Mund hat, ohne dass es Verstand genug besäße, sie auszuspucken oder hinunterzuschlucken; achtens und zum Schluss, weil es jeden Morgen seine Augen, seine Nase und seinen breiten Schnabel nach oben hält [. . .]” (196).

[For my part, I don't see why his claim to be [a human being – R. M.] is even a matter of dispute; first because it dares to lie claiming to be human; secondly, because it laughs like a madman, thirdly, because it howls like a fool; fourthly, because it blows its nose like a disgusting thing; fifthly, because it is feathered like a mangy creature; sixthly, because it carries its tail on its belly; seventhly, because it always has a number of small stones in its mouth without having the sense to spit them out or swallow them; eighthly and finally, because every morning it holds up its eyes, its nose and its broad beak (. . .).]

After this plea, the prisoner was sentenced to death: his sentence was to be was to be eaten by flies. But two sympathetic pigeons pardoned him. He fled to a large forest where the oaks could speak, and where there were fire-animals and ice-animals. A “soul” named Campanella, whom he met there, accompanied him on his search for the “soul” of Descartes. Within that magical space the fantastic tale ended.

Bernard Le Bovier de Fontenelle

In his *Entretiens sur la pluralité des mondes* (1686; *Conversations About the Plurality of Worlds*) Bernard Le Bovier de Fontenelle (1657–1757) drew not only on the insights of Descartes, but also on the narratives of Bergerac and Wilkins.⁶⁸ The

⁶⁸ Veit Elm, “Wissenschaftliche Geschichte und Literatur bei Fontenelle, Montesquieu, Voltaire und Rousseau,” *Wissenschaftliches Erzählen im 18. Jahrhundert. Geschichte, Enzyklopädik, Literatur*, ed. Veit Elm (Berlin: Akademie, 2010), 111–42.

dialogues appeared shortly before Charles Perrault's famous speech (*Poème sur le siècle de Louis le Grand*, delivered before the Académie Française in 1687), which reflected on the "Querelle des Anciens et des Modernes" [Controversy between the Ancients and the Moderns].⁶⁹ This speech was a tipping point in the development of anthropology, the demarcation of modern thinkers from the admirers of antiquity. In the essay Fontenelle formulated a basic idea for the representation of the multiplicity of animate worlds. According to his opinion, plurality and progress developed together:

Die Natur hat einen bestimmten Stoff zur Verfügung, der immer der gleiche ist, den sie in tausend Formen unablässig um und um wendet und aus dem sie die Menschen, Tiere und Pflanzen bildet [. . .].⁷⁰

[Nature has a certain material at its disposal, which is always the same and which it constantly turns over and over in a thousand forms and from which it forms people, animals, and plants (. . .).]

Fontenelle also formulated an idea of progress, one that figured not only in the realm of matter, but also in the realm of the spirit. "Alles in der Welt scheint dafür zu sprechen, dass die Vernunft sich vervollkommenet [. . .]."⁷¹ [Everything in the world seems to indicate that reason is perfecting itself.] Both assumptions allowed, according to Fontenelle, the emergence of the idea that life could exist on other planets. Fontenelle's intention was not only to interest women in astrophysics like the literary figure of the Marquise de G***, but also to tell an entertaining story about the cosmos:

69 Fontenelle published the essay *Digression sur les Anciens et les Modernes* in 1688. A modern interpretation was published by Pierre Macherey, "Fontenelle et la Querelle des Anciens et des Modernes," <https://philolarge.hypotheses.org/files/2017/09/04-01-2006.pdf> (last accessed on Aug. 14, 2023). See also *Fontenelle und die Aufklärung*, selection and intro. by Werner Krauss. *Theorie und Geschichte der Literatur und der schönen Künste*, 9 (Munich: Wilhelm Fink, 1969). The debate culminated in very important statements: Friedrich Schiller, "Über naive und sentimentalische Dichtung," *Horen* (Tübingen: Cotta, 11. and 12. Stück, 1795; 1. Stück, 1796); and Friedrich Schlegel, "Über das Studium der Griechischen Poesie," *Die Griechen und Römer. Historische und kritische Versuche über das klassische Altertum*, vol. 1 (Neustrelitz: Michaelis, 1797), 1–250.

70 Bernard Le Bovier de Fontenelle, *Œuvres diverses de M. de Fontenelle*, ed. Académie Française (La Haye: P. Gosse & J. Neaulme, 1727), 133–153. Bernard Le Bovier de Fontenelle, "Exkurs über die Alten und die Modernen," id., *Philosophische Neuigkeiten für Leute von Welt und für Gelehrte. Ausgewählte Schriften*, ed. Helga Bergmann (Leipzig, Reclam, 1991), 243. The concept of form probably refers to the ideas of Aristotle. Today, astrobiology does not use any of the earlier concepts such as the form (Hyle) but refers to the teachings of Charles Darwin, to his concept of natural selection.

71 Fontenelle, *Digression*. *Œuvres* (see note 70), 259.

Ich wollte mir nichts von den Bewohnern der Welten vorstellen, was gänzlich unmöglich und wahnhaft wäre. Ich habe mich bemüht, alles zu sagen, was man vernunftgemäß darüber denken konnte, und selbst die Phantasiebilder, die ich dem hinzugefügt haben, besitzen irgendeine wahre Grundlage.⁷²

[I did not want to imagine anything about the inhabitants of the worlds that would be utterly impossible and delusional. I have endeavored to say all that could reasonably be thought of them, and even the imaginary pictures which I have added have some basis in truth.]

That goals also explains why he does not report about people living on the moon, since the dwelling place of humans is the earth.⁷³ In the five conversations, each conducted during a lunar night, Fontenelle argued that there was no full similarity between humans and the inhabitants of the moon. This point could be proven by the climate theory that was frequently advocated at the time: different temperature ranges prevailed on the different planets, each suited best to its own particular denizens. There are no clouds on the moon and therefore no natural irrigation of the fields by rain. The inhabitants of the Earth's satellite planet lived in deep valleys called "mare." Just as humans are trapped in their atmosphere, the inhabitants of the moon likewise adapt to their atmosphere. It could even be that the moon would not be habitable. The essay concludes with a discussion of nature on the five planets known at the time and points out that it would be logical to consider the fixed stars as suns.

Immanuel Kant and Voltaire

In his early work, *Allgemeine Naturgeschichte und Theorie des Himmels* (General Natural History and Theory of the Heavens, 1755), Immanuel Kant agreed with some of Fontenelle's arguments. Since the laws of nature were valid throughout the universe, it could be assumed that the planets must be inhabited accordingly depending on the conditions present on them.⁷⁴ Kant generalized his idea:

Der Stoff, woraus die Einwohner verschiedener Planeten, ja sogar der Tiere und Gewächse auf denselben, gebildet sein, muss überhaupt um desto leichter und feinerer Art, und die

⁷² Bernard Le Bovier de Fontenelle, "Gespräche über die Vielzahl der Welten," id., *Philosophische Neuigkeiten* (see note 70), 15.

⁷³ This argument was directed against religious critics. God created Adam and Eve, and therefore humans, for the earth, not for other planets.

⁷⁴ Immanuel Kant, "Allgemeine Naturgeschichte und Theorie des Himmels," id., *Werke*, ed. Wilhelm Weischedel, vol. 1 (Darmstadt: Wissenschaftliche Buchgesellschaft, 1983), 377.

Elastizität der Fasern, samt der vorteilhaften Anlage ihres Baues, um desto vollkommener sein, nach dem Maße als sie weiter von der Sonne abstehen.⁷⁵

[The material out of which the inhabitants of various planets, and even the animals and plants on them, are formed, must generally be the lighter and finer, and the elasticity of the fibers, together with the advantageous arrangement of their structure, the more perfect, in proportion as they are farther from the sun.]

The question that interested Kant was: is the perfection of reason possible on other planets? On Venus and Mars, reason is less developed, on Earth it is at an intermediate level, while Jupiter and Saturn are populated by highly rational beings.⁷⁶ Animals or plants played no role in either Fontenelle's or Kant's work.

This idea also applies to a certain extent to Voltaire's story *Micromégas. Eine philosophische Geschichte* (*Micromégas* 1752). Voltaire reported on the visit of an intelligent creature called Micromégas from Sirius and his companion from Saturn, both of whom journeyed to Jupiter, Mars and finally to Earth. The space traveler from Sirius was a giant eight miles long and was very learned, and before his departure he had argued with the mufti, or the legal authorities of his planet, about "whether the fleas and slugs on Sirius had the same original form."⁷⁷ The companion from Saturn bore a strong resemblance to the secretary of the Academy in Paris, Fontenelle himself.

On their journey, the two arrived on Earth on July 5, 1737. As the travelers were as huge as Jonathan Swift's Gulliver, it took them a long time to discover life on Earth. They fished a whale out of the ocean by chance and assumed that it was the planet's most important inhabitant. It was only when they used a polished diamond like a magnifying glass to look more closely at the ground that they discovered the tiny humans. They were amazed to discover that they could talk sensibly with each other, but also expressed different opinions on the question of what a human soul was. To end a dispute that had broken out over this debate, Micromégas suggested writing a book for the humans, from which they could learn the purpose of all things and the meaning of existence. But when the human scholars opened the book, it contained only blank white pages. Science on the planets and on earth could not answer the question of the meaning of everything.

⁷⁵ Kant, *Allgemeine Naturgeschichte* (see note 74), 385.

⁷⁶ Kant referred to Alexander Pope's theory of the Big Chain of Being. Alexander Pope, *Vom Menschen. Essay on Men* (Hamburg: Felix Meiner, 1993), 33 (1. Letter).

⁷⁷ Voltaire, "Micromégas. Eine philosophische Geschichte," id., *Erzählungen, Dialoge, Streitschriften*, ed. Martin Fontius, vol. 1 (Berlin: Rütten & Loening, 1981), 48. First edition: *Le Micromégas de M. de Voltaire* (London and Paris: Michel Lambert, 1752).

Emanuel Swedenborg

Authors of the ancient world, the Middle Ages and the early modern period in particular used dreams as a “technical” medium for traveling into outer space. Something complex happens in dreams: the human body normally lies (almost) motionless in bed, but the mind moves along strange paths. It is possible to cross the boundaries of time, to move from the present into the past or the future and at the same time to move in different geographical spaces. A long duration can be experienced in seconds or a short time window can open in long phases. Dreams are highly emotional, as the prefrontal cortex works to a limited extent during the dream with its rational evaluation. The result can be a wishful dream or a nightmare. Whichever experiences the awakened subject will remember later varies from person to person, but the unsettling experience remains that the human body and mind can resonate still for a short while. Normally reality and fiction merge in the dream state, but in especially lucid dreams the individual navigates consciously through the dream.⁷⁸

One of the most important dreams in cultural history was Descartes’s dream that he had in Ulm where he was stationed as a soldier in the year 1619. The thinker dreamt that he woke up in a dream. And he explained waking up in a dream – a fantastic paradox. The next moment, the sleeper continued dreaming. The later narration of this numinous dream organized the process into a logical sequence. Descartes had dreamed of a book in which the “world formula” (a scientific formula explaining the existence of the cosmos and unifying all the basic

78 Hans Ulrich Reck, *Traum. Enzyklopädie* (Munich: Wilhelm Fink, 2010). “Die Neuzeit bedeutet einen entscheidenden Einschnitt für die Sphäre der Träume und des Onirischen generell. Die Träume werden narrativer, episodischer, peripherer, dezentrierter, banaler, hermetischer und disparater – und dies keineswegs nacheinander, sondern gleichzeitig. Die Sammlung der ‘großen’ zuweilen ‘welthistorischen’ Träume von Luther bis Descartes und Swedenborg [. . .] zeigt eine auffällige, wohl irreversible Verschiebung im Dispositiv des Onirischen in Richtung auf wechselnde Aspektualisierungen und damit auf eine stärkere konstruktive Beobachtung der Modellierung von Bedeutungserwartungen. Wenn Träume nicht mehr Offenbarungsträume sind, keine mantischen Traumgesichte, dann senden [. . .] die Götter keine Botschaften mehr auf diesem Kanal (127; The modern era represents a decisive turning point for the sphere of dreams and the oneiric in general. Dreams become more narrative, more episodic, more peripheral, more decentered, more banal, more hermetic and more disparate – and by no means one after the other, but simultaneously. The collection of ‘great,’ sometimes even ‘world-historical’ dreams from Luther to Descartes and Swedenborg [. . .] shows a conspicuous, probably irreversible shift in the dispositive of the oneiric toward different perspectives and thus also toward a more constructive observation of the modelling of expectations of meaning. If dreams are no longer revelatory dreams, no longer mantic dream visions, then [. . .] the gods no longer send messages on this channel”).

forces of nature) could be read. The memory of this led the philosopher to develop a proposal for solving the mind-body dualism.⁷⁹

Publius Cornelius Scipio Africanus had already undertaken his first journey into outer space in a dream. M. Tullius Cicero reported on this in *De res publica* in Book 6 (*Somnium Scipionis*).⁸⁰ After the long journey to Africa, Scipio sank into a deep sleep in which his ancestor, as an old man, gave him a view from the cosmos to the earth and then to the galaxy; the earth was spherical and round like the stars and planets in general. These were populated by spirits (ancestors) who, freed from their earthly bodies, had made their way to the sky/heaven. The visitor described the universe as the eternal abode of these spirits.

Emanuel Swedenborg (1688–1772) was a master of such dreamy speculations. He published his travelogue about his journey into the world of the celestial spheres in 1758:

Da mir aus göttlicher Barmherzigkeit des Herrn das Innere meines Geistes eröffnet worden ist, und mir dadurch verliehen wurde, mit Geistern und Engeln, die sich nicht allein in der Nähe der Erde, sondern auch bei anderen Erdkörpern aufhalten, zu reden – und darum, weil ich ein Verlangen trug zu wissen, ob es noch andere Erden gäbe, auch wie sie und ihre Bewohner beschaffen wären, ward mir von dem Herrn erlaubt, mit Geistern und Engeln aus anderen Erden zu sprechen [. . .].⁸¹

[Since, by the divine mercy of the Lord, the interior of my spirit was opened to me, and I was thereby granted to speak with spirits and angels who are not only near the earth, but also near other earthly bodies – and therefore, because I had a desire to know whether

79 Reck, *Traum. Enzyklopädie* (see note 78), 386–96. Descartes, *Meditationes* (see note 28), 33: “[. . .] quam frequenter vero usitata ista, me hic esse, toga vestiri, foco assidere, quies nocturna persuadet, cum tamen positus vestibus iacco inter strata!” [How often does it happen that I imagine all these ordinary circumstances during my night’s rest, for instance, that I am here, that I am sitting by the fireplace dressed in my toga, while I am lying in bed undressed.] Descartes therefore concluded that waking and dreaming could never be distinguished by certain characteristics.

80 M. Tullius Cicero, *Der Staat*, trad. and ed. Rainer Beer (Reinbek bei Hamburg: Rowohlt, 1969), 102–09, Book 6, 9–29. The book was written in around 54–51 B.C.E. In it, Cicero established his anthropology. For him, there is an unchangeable natural core of human beings that must be realized and developed in the course of individual history.

81 Emanuel Swedenborg, *Die Erdkörper in unserem Sonnensystem welche Planeten genannt werden* [etc.], ed. Friedemann Horn (Zürich: Swedenborg Verlag, 1875), 7; the original was published in London in 1758; the work has a total of around 30,555 pages. Swedenborg is commonly associated with the school of theosophy. Carl Kiesewetter, *Geschichte des neueren Okkultismus* (Wiesbaden: Marix, 2007), 244–83; Karl R.H. Frick, *Die Erleuchteten. Gnostisch-theosophische und alchemistisch-rosenkreuzerische Geheimgesellschaften* (Wiesbaden: Marix, 2005), 584–601. Swedenborg was in frequent contact with Isaac Newton and other astrophysicists.

there were other earths, also how they and their inhabitants were constituted, I was permitted by the Lord to speak with spirits and angels from other earths.]

Communication between humans and divines was possible because all angels and spirits originated from human forms. According to one of the main theses of pansophism, humans are by nature spirits in a universe in which everything is connected to everything else (i.e., connected through holistic monism).

Swedenborg believed that wherever there were earthly bodies, there must also be humans, humanoids, or divines residing on them. The spirit seer visited the moon, the five planets known at the time (Mercury, Jupiter, Mars, Saturn, and Venus) and the five celestial spheres with their fixed stars. The worlds were inhabited not only by spirits, angels, and humans, but also by animals. In the outermost sphere of the fixed stars, humans lived in an almost idyllic state:

Auf die Frage nach ihren Wohnungen sagten sie, dieselben seien niedrig, aus Holz, mit einem flachen Dache, um das ein schräg abwärts geneigter Kranz laufe, und vorn wohnten darin der Mann und die Frau, im anstoßenden Gemache die Kinder, dann die Mägde und Knechte. Betreffs der Speisen sagten sie, sie tranken Milch mit Wasser; die Milch erhielten sie von Kühen, welche Wolle wie die Schafe tragen. Von ihrer Lebensweise sagten sie, sie gingen nackt [. . .].⁸²

[When asked about their dwellings, they said that they were low, made of wood, with a flat roof, around which a sloping crown ran, and that the man and woman lived in the front, the children in the adjoining room, then the maids and servants. As for their food, they said that they drank milk with water; they got their milk from cows that carried wool like sheep. As for their way of life, they said they went naked . . .].

There is a constant springtime on their planet. On Mars, Swedenborg was able to observe some animals more closely. Those he examined were very similar to those on Earth: they had love instincts, wanted to feed themselves, and desired to live safely, reproduce, raise their young and provide for the winter. They had an innate knowledge for this behavior.⁸³ When the traveler on Mercury wanted to tell its inhabitants about Earth and its animals, he met with little interest. The Mercurians only changed their attitude when they realized that the birds on Earth were direct images of archetypes in the afterlife.⁸⁴

⁸² Swedenborg, *Die Erdkörper* (see note 91), 105 (no. 176).

⁸³ Swedenborg, *Die Erdkörper* (see note 91), 61 (no. 61). In his theory of animals, Swedenborg referred to Plato. According to this theory, animals have a share in the spiritual, but they are far below humans.

⁸⁴ Swedenborg, *Die Erdkörper* (see note 91), 19 (no. 32).

Early Modern Cosmology and the Concept of Nature

This section systematizes the descriptions of the individual authors and places them in the context of the state of knowledge of the cosmos at the time. The significance of aesthetics for the existing images of humankind will also be considered. To this end, the question of the development of the concept of nature and natural science will be discussed in more detail, and a look at earlier and later periods will prove necessary to understand this development. The extremely divergent positions that emerge also pose a problem for the present study, as they highlight above all the indeterminacy of the concept of nature, both then and now. It should first be acknowledged here that complications emerge throughout the history of the observation and philosophy of nature; however, these have always been related to our understanding of the position of humans in relation to nature. A concept of nature without reference to people and humanity can hardly be scientifically justified.⁸⁵ Jörn Sieglerschmidt and Birgit Biehler noted in the *Encyclopaedia of the Modern Age*:

Der Naturbegriff ist zu allen Zeiten eine Projektionsfläche für die Selbstvergewisserung des Menschen in seiner Welt gewesen und daher nicht nur kategorial für sein gesamtes Denken, sondern auch zeitlich und räumlich außerordentlich vielschichtig. Er widersetzt sich konzipier und eingängiger Bestimmung, da er immer grundlegender Teil menschlicher und daher historisch unterschiedlicher Welterklärung ist [. . .].⁸⁶

[The concept of nature has always been a projection surface for people's self-assurance in his world and therefore not only categorial for his entire thinking, but also extraordinarily complex in terms of time and space. It resists concise and catchy definition, as it is always a fundamental part of human and therefore historically different explanation of the world (. . .).]

Sieglerschmidt and Biehler go on to explain that attempts were made to establish different concepts of nature. The explanation of the etymology (i.e., *physis*, *natura/nasci*) already shows this difference. It is clear to see “that nature always related to the living, growing and becoming as well as to the inanimate environment of humans and thus included humans themselves.”⁸⁷ The difficulty of dealing with this

⁸⁵ The distinction between a nature that is free of humans and a nature that is untouched by humans provides the possibility to define the concept of nature differently. Gregor Schiemann, “Jenseits der Naturverhältnisse: Natur ohne Menschen,” *Naturphilosophie*, ed. Thomas Kirchhoff and Nicole C. Karafyllis (Tübingen: Mohr Siebeck, 2017), 248–53; here 250.

⁸⁶ Jörn Sieglerschmidt and Birgit Biehler, “Natur,” *Enzyklopädie der Neuzeit*, ed. Friedrich Jaeger, vol. 8 (Darmstadt: Wissenschaftliche Buchgesellschaft, 2008), 1133–59; here 1134.

⁸⁷ Sieglerschmidt and Biehler, “Natur” (see note 86), 1135.

paradox also resonated in the early modern period.⁸⁸ Concerning the concept of nature in the early modern period, it would be problematic to ignore the human dimension (anthropology).

To this day, ideas that define the concept of nature as the polar antitheses of other concepts are still popular but have a limited impact: Nature – culture, nature – technology, nature – metaphysics, nature – supernatural (i.e., supranaturalism), nature – history. Polarizations of this kind prove to be difficult. This principle applies above all to the concept of “nature – culture.”⁸⁹ In this binary configuration, nature is always defined by something that it is not. Hans-Dieter Mutschler remarked in the volume *Naturphilosophie*: “Die Zeiten, da wir zu wissen glaubten, was ‘Natur’ eigentlich sei, sind vorüber. Jetzt steht eine argumentativ gestützte Neubestimmung dieses Begriffs ins Haus”⁹⁰ [the times when we thought to know what ‘nature’ means, are over. Now we are facing an argument-based redefinition of this term.]

It is therefore necessary to examine what understanding of nature can be found in the early modern period. For even in that era, as Rossi had described it, multiple and often incompatible views were differentiated. Whether Protestantism was the decisive factor for the extensive changes in the sciences does not need to be discussed here.⁹¹ Descartes’s mechanical view of the world and his du-

⁸⁸ *Der Naturbegriff in der Frühen Neuzeit. Semantische Perspektiven zwischen 1500 und 1700*, ed. Thomas Leinkauf (Tübingen: Max Niemeyer, 2005), 87.

⁸⁹ Wilhelm Perpeet, “Zur Wortbedeutung von ‘Kultur’,” *Naturplan und Verfallskritik. Zu Begriff und Geschichte der Kultur*, ed. Helmut Brackert and Fritz Werfelmeyer (Frankfurt a. M.: Suhrkamp, 1984), 21–28. The derivation of “agri-cultura” in the meaning of agricultural activity and at the same time of its prerequisite, the arable land, is decisive. This is how the term was used in the ancient world, but also in Christianity (God as a sower, Gospel of Mark 4:1–20). The connection between humans and animals and plants as part of nature was emphasized in Carl von Linné’s classification and taxonomy (*Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis* [Leuven: Johannis Wilhelmi de Groot, 1735]).

⁹⁰ Hans-Dieter Mutschler, *Naturphilosophie* (Stuttgart: Kohlhammer, 2002), 11. Thomas Kirchhoff also rejects the method of using opposites to fix the concept of nature. Myriam Gerhard et al., “Einleitung,” *Naturphilosophie*, ed. Thomas Kirchhoff and Nicole C. Karafyllis (see note 85), 4–5. According to the two authors, natural philosophy therefore leads a shadowy existence in philosophy. The different theoretical ideas cannot be combined. Thus, theoretically oriented natural philosophy stands alongside numerous approaches to the empirical sciences, alongside speculative considerations, a phenomenology of nature, numerous forms of holism, many approaches to an ethics of the natural sciences, right up to a view that regards nature as a lifestyle or worldview. Gregor Schiemann, “Gegenwärtige Strömungen der Naturphilosophie,” Kirchhoff and Karafyllis, ed., *Naturphilosophie* (see above), 73–81.

⁹¹ Max Weber, *Die protestantische Ethik* (1904/1905; Tübingen: J. C. B. Mohr, 1920).

alism of substances stood in contrast to many non-mechanistic conceptions of nature and man. However, Descartes also remained a Christian in his arguments, and this faith orientation also applied to many of the authors presented here. Galileo spoke of the perfection of divine creation, as did Kepler. Wilkins confirmed the importance of their faith when he defended the ideas of these two eminent cosmologists.

In Godwin's work, the inhabitants of the moon believed in a creator god called Martin. Bergerac criticized the sensualist atheism of the aliens and had his hero discuss the question of whether God existed. Swedenborg had even received permission from God to visit the aliens and talk to them.

The development in the sciences, particularly the incipient turning away from theologically interpreted Aristotelianism, took place not only in the Protestant regions of Europe, but also in the Catholic countries of France and Italy. As has been shown, reflections of Cusanus opened the way to a relativization of Aristotle's views on cosmos.

More important for the emergence of new concepts of nature, however, were probably the concrete social changes in Europe, the higher level of education and literacy (as facilitated by printing), the expansion of knowledge through an enormous increase in seafaring exploration, the expansion of world trade, encounters with foreign cultures, languages and religions, and the development of colonialism, which prompted the hunger for natural resources of the new bourgeois classes, just to mention just the most important factors.⁹² For most authors, space travel was similar to seafaring. Space travel was just as dangerous as seafaring, confronting the voyager with new views of the cosmos and forms of non-human nature on foreign stars. In this way the space traveler is like the seafarer engaging with the people of the newly discovered continents, who behaved differently to Europeans.

The shifting scientific paradigms in physics, or more precisely in astrophysics, were revolutionary for the early modern period.⁹³ The astrologers became astronomers. Natural history was supplemented and later replaced by natural

⁹² According to Damien Tricoire, *Die Aufklärung* (Cologne and Vienna: Böhlau, 2023), 298, colonialism was seen as a marginal phenomenon until the Enlightenment. The works of Immanuel Wallerstein can be read against this assertion. Immanuel Wallerstein, *Das moderne Weltsystem: Die Anfänge kapitalistischer Landwirtschaft und die europäische Weltökonomie im 16. Jahrhundert*, trans. Angelika Schweikhart (Frankfurt a. M.: Syndikat, 1986); and id., *Das moderne Weltsystem II: Der Merkantilismus. Europa zwischen 1600 und 1750* (Vienna: Promedia, 1998). On the emergence of the modern sciences, see Edgar Zilsel, *Die sozialen Ursprünge der neuzeitlichen Wissenschaft*, ed. Wolfgang Krohn (Frankfurt a. M.: Suhrkamp, 1976).

⁹³ The most important study of this idea is Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago, 1962).

science. The geocentric view of the world was abandoned at the latest with the discovery of a supernova by Tycho Brahe in 1572.⁹⁴ Now most scientists no longer explored the cosmos with the help of the Bible, with divine revelation, or the commentaries on the holy book. Instead, their explorations proceeded not with spiritual guidance but instead with the help of technical equipment. This transition led to the rapid development of new technologies. This development would have been inconceivable without the philosophical ideas and controversies of Descartes and Locke (i.e. empiricism/sensualism). Today's space travelers, who still have never seen an alien to this day (as any extraterrestrial beings have kept their distance from Earth, have oriented themselves after the new natural science and its possibilities).

This approach is evident in Kepler's work. He gave an account of the nature of the alien planets, of the types of their geography, and an accounting of what can be seen in each planet's sky. The view of the fixed stars of Levania is described as similar to the view from Earth. At the same time, however, Kepler noted that astronomy on Levania is completely different from that on Earth. In the story told by Godwin, Gonsales agreed with such a view. For him, too, the fixed stars appeared a hundred times larger when he looked at the sky from the surface of the moon. He recognized the accuracy of the new image of the cosmos that Copernicus had outlined. The traveling hero in Bergerac referred to the new worldview (echoing Gassendi) and, looking up at the sky, noted that planets orbited the fixed stars. The decisive factor was that the traveler reported on his sensory perceptions and his scientific knowledge. He could not be uniformly objective, but still took a stand on issues that were being discussed on Earth.

The ontological dualism, which Descartes had introduced into thinking about nature, was significant in this process. The transformation of natural history into a science took place particularly through the implementation of modern rationalism (Descartes and others) and of empiricism through John Locke (1622–1704), whose sensualism as a new attitude toward nature. The scientific reductionism, which was associated with both ways of thinking, but also attentive to the image of nature, demanded that nature must be tortured in order to confess the scientific truth⁹⁵ The method of deduction required confirmation by experimentation, which generally answered only a single question and assumed that the whole of nature could be explained by it.

⁹⁴ On the classification for Descartes and Brahe, see Pierre Chaunu, *Europäische Kultur im Zeitalter des Barock* (Frankfurt a. M.: Fischer, 1989), 527–88.

⁹⁵ "Nam causarum finalium inquisitio sterilis est, et, tanquam virgo Deo consecrata, nihil parit." Francis Bacon, "De dignitate et augmentis scientiarum," *The Works of Lord Bacon*, ed. Robert L. Ellis, Douglas D. Heath, and James Spedding (London: Longman & Co., 1841), vol. 2, 340.

The image of outer space, which since antiquity was supposed to be filled with ether, was overcome, and the phenomenon of empty space and its infinite vastness was accepted. Wilkins was intensely preoccupied with the question of empty space, which had already been posed by Epicurus. The idea that the cosmos consisted solely of the solar system was quickly abandoned, and the scientists refigured our own galaxy as an extended space in which the stars twinkled. The problem of why the apple falls to the center of the earth was explained with the help of the new theory of gravity. During his flight in space and when he landed on the moon, Gonsales experienced that he was freed from gravity by the earth.⁹⁶ This explanation also applied to the celestial planets and their movements. Thus, the geocentric view was abandoned in favor of a heliocentric one, which meant that the anthropocentrism of the early modern period was called into question.⁹⁷ Humans were no longer seen as the center of the cosmos and had to redefine their position in the cosmos. This question preoccupied later authors such as Kant, Voltaire, and Fontenelle.

Nature was also seen as a product that a mathematical mind could have created and that could be recognized and explained with the help of mathematics. Some authors of that time thought that they could regard God as a logician and mathematician who had created the world. To that end, the book of nature was read as a book of mathematics.⁹⁸ We could conclude here that nature was now regarded as an ontological thought model of a mathematically oriented natural science. In other words: The new scientism narrowed down the concept of nature to the object that the natural sciences can begin to understand through investigation.⁹⁹ In Bergerac's text, the planets behaved like spheres that moved in a circle. In Godwin's work, Gonsales calculated the light conditions on the moon. Duracotus calculated the orbits of the fixed stars around Levania, counted the orbits of the sun, and researched the relationship of the light at the poles and at the equator of the island planet.

⁹⁶ Godwin, *The Man* (see note 58), 32.

⁹⁷ Wilhelm Windelband, *Lehrbuch der Geschichte der Philosophie* (Tübingen: J. C. B. Mohr, 1950), 223–24.

⁹⁸ “Kepler war tieferreligiös. Er glaubte, Gott habe die Welt nach einem mathematischen Plan erschaffen und sah es als seine Pflicht als Christ, diesen Plan zu verstehen” [Kepler was deeply religious. He believed that God had created the world according to a mathematical plan and saw it as his duty as a Christian to understand this plan.] Wolfgang Blum, *Schnellkurs Mathematik* (Cologne: DuMont, 2007), 92. Max Tegmark, *Unser mathematisches Universum. Auf der Suche nach dem Wesen der Wirklichkeit* (Berlin: Ullstein, 2014), 23–60. For an explanation of this metaphor, see Hans Blumenberg, *Die Lesbarkeit der Welt* (Frankfurt a. M.: Suhrkamp, 1986), 215–32.

⁹⁹ To this day, scientists' naturalism holds the view that all phenomena in the world can be explained scientifically.

This new attitude was clearly recognizable in the distribution of maps in the modified new formats during the early modern period.¹⁰⁰ The fictional space travelers moved through outer space and on distant planets like with their fingers on a map of the star system.

As already briefly mentioned, the authors presented here not only revealed their sensory perceptions, but also referred to the geography of the planets and in some cases gave detailed descriptions of the landscapes. The character Bilgram in Venator's novel even found an extraterrestrial guide with whom he could explore the moon. The hero in Bergerac's story traveled to sunspots, through barren landscapes, and over dark patches that in his ignorance he could only describe rudimentarily; he watched a figure emerge from the mud that resembled a human being. The ground shone white as snow. Fontenelle reported that there were no clouds or rain on the moon, that there must be deep valleys, and that the aliens had adapted to the different temperature zones. For their part, the travelers projected by Kant and Voltaire encountered geology that was alien to them. Lower levels of gravity even meant that the aliens living in those alternative atmospheres were several times larger than humans on Earth. Even for Swedenborg, the distance of the celestial spheres from the earth determined the type of living beings (spirits) on the respective planets. For him, some aliens existed almost like simple farmers on earth; they fed on the milk of wonderful creatures that looked like cows, and they lived in a constant spring. The animals followed certain behaviors that were similar to those on Earth. Despite all the miracles, the laws of nature applied to the entire cosmos. Therefore, the position in space could be determined by precisely measuring the alien planet.

As already reported, Descartes postulated the existence of two substances in the entire cosmos. The extended substance (*res extensa*) applied to all material phenomena, and this principle held on whatever planet an earthly traveler might visit. According to him, people consisted of two substances. Descartes explained

100 Ute Schneider, *Die Macht der Karten. Eine Geschichte der Kartographie vom Mittelalter bis heute* (Darmstadt: Primus, 2006), 64–77. Abraham Ortelius printed a quote from Cicero on his world map. “Quid ei potest videri magnum in rebus humanis, cui aeternitas omnis, totiusque mundi nota sit magnitudo, Cicero” [For what can seem great in human affairs to one who is aware of all eternity and the greatness of the entire cosmos? Cicero.] Abraham Ortelius, *Theatrum Orbis Terrarum. Gedruckt zu Nuernberg durch Johann Koler Anno MDLXXII*, ed. Ute Schneider (Darmstadt: Wissenschaftliche Buchgesellschaft, 2012), 12–13. Mercator published a world map on which the curvature of the earth was shown on a surface. The quotation is taken from the conversations in *Tusculum* by Cicero (Book 4, No. 37). See Cicero, *Gespräche in Tusculum*, trad. Olof Gigon (Munich: Deutscher Taschenbuchverlag, 1991), 190.

that he had an extended body in space and a spirit/ mind without a body.¹⁰¹ Being a human meant having two sides: existing like a machine, but also having freedom of will. This anthropological assumption presented contradictions and engendered many problems for the understanding of our life on earth and the life of multiple other aliens throughout outer space.

Swedenborg, however, discussed the body-soul problem, and explored the question of substances in a different way than Descartes.¹⁰² In the story of Bergerac, the hero learned that the living beings he saw could also be pure spirits (demons). He discovered that there was nothing material (*res extensa*) in their nature. Voltaire was also concerned with this question. Kant believed in the eternal validity of the laws of nature. He understood developments on alien planets as dependent on the composition of their material substance. In contrast, Swedenborg, in his report, had overcome without any difficulty naturalistic monism in favor of the spirits in outer space.

However, the world was not simply an autonomous mechanism, but also a wonderful, fantastic invention. This duality also concerned nature on the alien planets. The animals on the moon that the space travelers encountered were not simply geese, but creatures from a fictitious place like a paradise that sometimes existed on Earth.¹⁰³ They headed for the moon of their own accord, out of their own consciousness and without Gonsales's command. They were aliens, like all the other figures the observer encountered on the moon. The Spaniard found many animals species on the moon that were completely different from those on Earth. He had the impression that the creatures, which were somewhat more like hominids on Earth but had strange facial features and different skin pigmentation, had organized themselves socially. But not only humans: in those alien environments ants and bees also practiced this type of state formation. In their states

101 This also applies to the atomism advocated in the early modern period which cannot be presented here.

102 "Alle Geister und Engel stammen nämlich aus dem Menschengeschlecht (a), halten sich in der Nähe ihres Erdkörpers auf (b), und wissen, was dort vorgeht. Es kann auch ein Mensch, dessen Inneres so weit eröffnet ist, dass er mit ihnen in Umgang und Verkehr zu treten vermag, durch sie Belehrung empfangen; denn der Mensch ist seinem Wesen nach ein Geist (c), und in Betreff seinen Innern Geistern zugesellt [. . .]." [All spirits and angels originate from the human race (a), stay close to their earthly body (b), and know what is going on there. A person whose inner being is opened to such an extent that he is able to enter into contact and communication with them can also receive instruction from them; for man is by nature a spirit (c) and is associated with spirits in regard to his inner being (. . .).] Swedenborg, *Der Erdkörper* (see note 82), 7.

103 The name for the god on the moon is Martin, the patron saint of geese. These animals are said to have betrayed the saint when he tried to avoid being elected bishop. Martin's goose was to be delivered as a tribute on his feast day (November 11).

he observed that there are divisions of labor; that there are slaves and rulers, in this case the queens; and that there are differences in the morphology of the body. The Lunarians also kept slaves and were strictly ruled by a monarch.

Fontenelle took a different approach: He acknowledged Descartes' basic assumptions and therefore claimed that there could only be one substance in the cosmos that could be found everywhere. The only differences were the forms and proportions that this substance could take. At the same time, he emphasized Descartes's rationalism and stated that reason was perfect everywhere in the cosmos. He was therefore able to depict the aliens as similar to humans on their respective planets. Even echoes of the climate theory elaborated by Charles de Montesquieu (1689–1755) can be found in his work.¹⁰⁴ In advancing these collective observations, it was Kant who first suspected that living beings on other planets showed a wide range of variation in terms of the substance of matter and spirit.

As has just been summarized, the new cosmology made possible a revolutionary view not only of natural science, but also of any form of non-human nature, in which the entire cosmos was understood as nature.¹⁰⁵ Now new questions arose: Is the moon simply another Earth or something completely different? What does the geology of the planets in the solar system look like, and what does biological life look like there, if there is any? Is it possible for the human mind to imagine what cosmic life or what the biosphere looks like on alien planets? Such questions occupied the mind of scientists such as Galileo, Kepler, Wilkins and many others whose positions cannot all be represented here.¹⁰⁶ Collectively they triggered the scientific revolution and expanded the conceptions of nature that people on earth had held previously. However, they also led to the so-called Copernican mortification of the human individual, as *mankind* had lost his central position in the world due the new cosmology. Now, *humankind* had to reposition itself in the world and answer the question anew: What is the meaning of humankind?¹⁰⁷

104 Charles de Montesquieu, *Vom Geist der Gesetze*, ed. Ernst Forsthoff, vol. 1 (Tübingen: Mohr, 1992), 310–328.

105 At present, the concept of totality is usually equated with holistic views of the world. Gloy, Karen, *Das Verständnis der Natur*. 2 vols. (Munich: Beck, 1995). James Lovelock, *Gaia – a New Look at Life on Earth* (Oxford: University Press, 1979).

106 Michael Schetsche, "First Contact – Begegnungen jenseits der Erde. Zur Prognose interstellarer Kulturkontakte," *Expedition ins Sternenmeer. Perspektiven, Chancen und Risiken einer interstellaren Raumfahrt*, ed. Harald Zaun (Berlin: Springer, 2022), 329–41. He presents the perspective of a human xeno-ethnology. Christoph Endres, "Fantastische Odysseen im Weltraum – Der Flug zu den Sternen in der Literatur," *Expedition*, 343–58; Bettina Wurche, "Arrival – Fiktionale Erstkontakt-Szenarien via Raumfahrt," *Expedition*, 359–74.

107 This question became dominant in the age of Enlightenment. Kant's philosophy can be well understood from it. He also spoke of humankind being released from the womb of nature, in which

The Contribution of Literature

These questions inspired the poets to set out for new shores. For all the authors mentioned, the cosmos could finally be seen as an object of order and, at the end of the epoch, also of beauty.¹⁰⁸ Beauty and sensual perceptions are closely linked, and within their contextual relationship the concept of atmospheres offers a vivid example.¹⁰⁹ The spaceman in Bergerac's text in particular crossed various landscapes that triggered strong feelings in him. Winds raged, and oppressive heat made it difficult for the traveler to move on, though sometimes the extreme weather gave him a feeling of bliss. On the ugly patch of a muddy sun he met a disgruntled inhabitant, the naked man, who taught him about the nature of music. According to the naked man, musical harmonies enable the soul to be lifted and to flood the listener with feelings, all beyond the realm of the visible.¹¹⁰ The language of most of the aliens in the stories was music without words. The aesthetic contemplation of nature cannot be achieved for human beings without perception through the senses, but also not without comparison with earthly experience or imagination in the design of the cosmos. The contemplation of nature, ugly or beautiful, cannot be achieved without this fundamental sense of an underlying cosmic design.

This complex therefore includes the question of imagination as a force, a matter which select authors also reported on. Here, too, visions, dreams, and fantasies are not only found among poets, but also among scientists and philosophers. The best-known example in the entire world of science is probably the story of August Kekulé's discovery of the benzene ring. He reported that he was daydreaming in the bus and discovered how atoms were bouncing back and forth before his eyes, holding hands and formatting pairs with long chains. The secret of the benzene ring was decoded. In realizing that arrangement through a dream-like vision, he joined Scipio the Elder, countless medieval poets, Kepler, Descartes, Venator's Bilgram, and Swedenborg who all also dreamed and told of their dream visions. Imagination made it possible to describe the impossible and, to humans,

it had been in paradise, triggered by the free use of reason (freedom from purpose). Immanuel Kant, "Mutmasslicher Anfang der Menschengeschichte," id., *Werke*, ed. Wilhelm Weischedel, vol. 9 (Darmstadt: Wissenschaftliche Buchgesellschaft, 1983), 85–102; here 91.

108 Martin Seel, *Eine Ästhetik der Natur* (Frankfurt a. M.: Suhrkamp, 1991); Silvio Vietta, *Die vollendete Spekulation führt zur Natur zurück. Natur und Ästhetik* (Leipzig: Reclam, 1995); Winfried Menninghaus, *Wozu Kunst? Ästhetik nach Darwin* (Frankfurt a. M.: Suhrkamp, 2011); Karl Eibl, *Kultur als Zwischenwelt. Eine evolutionsbiologische Perspektive* (Frankfurt a. M.: Suhrkamp, 2009).

109 Gernot Böhme, *Atmosphäre. Essays zur neuen Ästhetik* (Frankfurt a. M.: Suhrkamp, 2013).

110 Bergerac, *Die Mondstaaten* (see note 63), 170.

the imperceptible (i.e., life on alien planets, encounters with aliens, and the experience of extremely different landscapes).¹¹¹

The texts considered here are literary and fictional, but also natural-scientific, often even speculative-philosophical works within which we can discover a merging of early modern cosmology with concepts of nature at large, and with principles of a pre-modern anthropology.

Often, the Earth was the center of those narratives and accounts, the only planet in the solar system that all authors discussed here knew about and the atmosphere they all lived within. Those texts commonly stood in well-known traditions and were also influenced by other literary forms, including idyls, utopias, satires (stories with lies), and emerging new forms of fantasy.¹¹² The authors discussed here transgressed the limits of philosophical and scientific understanding, and they left behind the boundaries of natural laws and natural constants. They moved away from the confining methods and beliefs of mechanism, reductionism, and the ontological dualism, all of which were common approaches in the sciences at that time. In response, they projected non-mechanistic concepts of the cosmos, its natural conditions, and inhabitants. As far as fictional literature is concerned, most of the authors were opposed to the disenchantment of the world, of which Max Weber was to talk about later as a phenomenon that had started in the early modern age, a response to the enchantment of nature.¹¹³

The impact on the notion of nature and people was profound. The freedoms realized from such imaginative fantasy did not only change the self-concept of humans and the idea of nature. The extension shown so far within literature (i.e., fantastic texts, or science fiction, for example), and within the natural sciences (i.e., thinking beyond the limits of the small planet Earth) led authors of all types toward the experiences of an innovative joy, a new form of courage, and a purposeful energy to turn with all means available to people's own attention to the cosmos as an expanded space as a possible host for human life.¹¹⁴

111 Editor's note: See also the contributions to *Imagination and Fantasy in the Middle Ages and Early Modern Times: Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 24 (Berlin and Boston: Walter de Gruyter, 2020).

112 Philipp Weber, "Vom Lehrgedicht zur Prosa. Zur Geschichte der literarischen Kosmologie vom frühen 18. bis zur Mitte des 19. Jahrhunderts," *Kosmologie. Non Fiktion. Arsenal der anderen Gattungen*, ed. Tim Sparenberg and Philipp Weber, 14.1/2 (2019), 15–51.

113 Max Weber, "Wissenschaft als Beruf (1919)," *Schriften 1894–1922*, ed. Dirk Kaesler (Stuttgart: Alfred Kröner, 2002), 474–513; here 488.

114 A part of the translation was kindly provided by Albrecht Classen; Warren Tormey offered some corrections. I would like to thank Albrecht Classen and Warren Tormey for their generous help with this article.

William Mahan

Praising Perchta as the Embodiment of Nature's Cycles: Worship and Demonization of Perchta and Holda in Medieval and Early Modern Culture

Abstract: Those familiar with Perchta typically think of a Krampus-like creature as part of Alpine traditions preserved through folklore and, especially costumes, or in some cases the name brings to mind a 'Christmas Witch.' This paper examines Perchta as a goddess, depicted in medieval and early modern texts as an embodiment of nature's elements including the Winter and Spring seasons. Religious and other sources condemned the worship of Perchta and demonized the goddess, but in folklore and customs surrounding Perchta, she is honored as a protectress and as part of nature, often having animal-like qualities or identified as a personification of the seasons. This paper considers Perchta in religious and secular texts as well as folk customs including "feeding," such as leaving a plate of food outside for Perchta, and mumming, or mask-making, and considers both individualized and pluralistic appearances of Perchta and Perchten. In her duality of brightness and beauty versus darkness, the demonic, and death, Perchta reflects cycles in nature such as day and night or the changing of seasons. The costumes of goatskin, horns, masks, fangs, and twigs all reflect the embodiment of nature and wildness (as the name "Wild Hunt," a motif in northern European folklore popularized by Jacob Grimm, implies) in human-like form. The worship or "feeding" of Perchta, essentially a reverence of the seasons and an acknowledgment of human dependence on nature, deeply troubled the Church as a connection to a false idol. Pagan celebrations of nature and the seasons conflicted with Christian holidays and represented a refusal to convert and pay taxes to the Church by people who lived in remote areas and retained traditional pagan beliefs. Perchten (pl.) are personified as forces of nature in identities such as "Winterdämonen" (wild winter demons), wild women of the mountain forests, or in other cases as bright ushers of spring.

Keywords: Perchta, Holda, Holle, demonic, embodiment, winter, seasons, Alpine, folklore

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Introduction

From cave drawings to early written texts, there is replete evidence that, since the beginnings of recorded history and even in pre-literate societies, humans have struggled to understand the complexities of nature. Humans have invented deities, monsters, and mysterious beings, all of which were reflections of their tangible physical surroundings. Thus, humans have created stories to describe phenomena they observed but did not have sufficient scientific knowledge to understand in terms of biology, geology, and the laws of physics. This relationship has evolved with the progress of human knowledge, but secrets still remain within nature and our relationship to it until today.¹

This paper considers the lasting influence of Proto-Indo-European understandings of nature that were culturally preserved well into the Middle Ages and early modern period, especially in traditions based on pagan religion and folklore, even as they were adapted into Christian culture. This paper considers Perchta in religious and secular texts. In her duality of brightness and beauty versus darkness, the demonic and death, Perchta reflects cycles in nature such as day and night or the changing of seasons. The *Enzyklopädie des Märchens* (Encyclopedia of German Fairy Tales) identifies the names Percht, Frau P, Per[c]hta, Ber[c]ht[a], and Perschtl with “eine im Oberdeutschen, vor allem in Bayern, Österreich und Südtirol, im slov. Kärnten, aber auch im Vogtland verbreitete Sagen- und Brauchgestalt mit ambivalenten Zügen und vielschichtigen Funktionen” (a legendary and customary Upper German folklore figure with ambivalent traits and multifaceted functions, prevalent especially in Bavaria, Austria and South Tirol, in Slovenian Carinthia, and also in the Vogtland).² In the *Enzyklopädie*, we read that “Grimm setzte sie mit der mitteldeutsche Frau Holle gleich und verstand sie als deren dunkle, dämonische Seite” (“Grimm equated her with the Middle High German Frau Holle and understood her as her dark, demonic side”).³ Whereas Perchta is more associated with landscape in the Alps, Holle or Holda is more associated in Central and Northern Germany with the household.⁴

1 Cf. Albrecht Classen, *The Secret in Medieval Literature: Alternative Works in the Middle Ages*. Studies in Medieval Literature (Lanham, Boulder, New York, and London: Lexington Books, 2022).

2 Beate Kellner, “Percht,” *Enzyklopädie des Märchens*, vol. 10, ed. Rudolf Wilhelm Brednich, Hermann Bausinger, Wolfgang Brückner, Helge Gerndt, Lutz Röhrich, and Klaus Roth (Berlin and New York: Walter de Gruyter, 2002), 722–26; here 722. All translations of this text here are my own. See also the article “Perchta” in the *Handwörterbuch des deutschen Aberglaubens*, ed. E. Hoffmann-Krayer et al. (Berlin and Leipzig: Walter de Gruyter, 1933–1934), vol. 6, 1478–92.

3 Kellner, “Percht,” *Enzyklopädie des Märchens*, vol. 10 (see note 2), 722.

4 Lotte Motz, “The Winter Goddess: Percht, Holda, and Related Figures,” *Folklore* 95.2 (1984): 151–66; here 157.

The ambivalent traits of beauty and benevolence and the demonic are reflected in identities of masked figures that appear in the “Perchtenlauf” or “Perchtenjagd” in Salzburg and Tirol, and the “Streggelijagen” and “Posterlijagen” in Switzerland, as well as the masked procession and feast of “berchtelen” in Switzerland and Alsatia.⁵ This takes place “on the three Thursdays before Christmas in villages near Salzburg, on the ‘Perchtentag’ (Epiphany) in Kitzbühel, and sometimes also during the Shrovetide (‘Fasching’), as in Lienz or Tyrol.”⁶ In these masked ceremonies, “Perchten are impersonated by young men of the village and appear in some places in double form, as ‘handsome’ (‘schöne’) and ‘hideous’ (‘schiache’) Perchten.”⁷ This is a reflection of the regional folklore: “Frau Holle is fair when she is observed in her bath at Frau Hullis Badeplatz,”⁸ although there is rarely an erotic element to Holle or Perchta. In addition, “Percht as the queen of the Heimchen in the Voigtland is of tall and stately figure, veiled and clothed in white,”⁹ and the girl “who impersonates Frau Holle in Wertheim will dress in white and wear a crown upon her head.”¹⁰ On the other hand, she is often depicted as aged and ugly: near the Kyffhäuser mountain in Thuringia, as “old and hunchbacked;” in Mölltal as “grauer Wüzel” (“grey, wizened wight”); the elderly Frau Wolle is said to live in the “Frauwullenloch” of the mountain Schlachtenberg near Frankhausen in Thuringia.¹¹ Euphemistically, “Butzebrecht” in Swabia designates “old and ugly women,” “Percht” refers to an “unkempt hag” in Tyrol, and

5 Motz, “The Winter Goddess” (see note 4), 152. See also Viktor Waschnitius, *Percht, Holda und verwandte Gestalten. Ein Beitrag zur deutschen Religionsgeschichte*. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien, 174.2 (Vienna: Hof- und Universitäts-Buchhändler, 1913), 70.

6 Motz, “The Winter Goddess” (see note 4), 153. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 37–38; 57.

7 Motz, “The Winter Goddess” (see note 4), 153. Motz describes further: “While the ‘handsome’ wear the traditional costume of the region, the ‘frightful’ may be cloaked in fur, usually black, their heads covered by the ‘Perchtenhaube,’ their belts hung with bells, their faces hidden behind masks of terrifying aspect. Their race proceeds from house to house, or even from village to village, through the valleys, amidst the deafening clamour of their bells, their whips, their shouts of joy” (153).

8 Motz, “The Winter Goddess” (see note 4), 153. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 82.

9 Motz, “The Winter Goddess” (see note 4), 153. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 86.

10 Motz, “The Winter Goddess” (see note 4), 153. Wertheim is near Würzburg in northern Franconia/Bavaria.

11 Motz, “The Winter Goddess” (see note 4), 156. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 108.

“mött de Holle fahren” (to ride with Holle) means to have unkempt hair in Hesse – hence the term “Hollzopf” (Holle braid).¹²

In addition to a male counterpart Berchtold from Switzerland, the *Enzyklopädie* notes similar feminine figures from the larger Germanic region.¹³ The figure of Perchta, mostly appearing in German and Austrian culture, has been portrayed in diverse identities since the early Middle Ages. Initially, Perchta was a beautiful goddess and a representation of nature, especially either of growth, birth, fertility, and the coming of spring or – conversely – death and winter. How does this beautiful goddess become transformed, and adapted in the Middle Ages into an ugly demonic witch who kidnaps children in her basket? My answer to this question is that Perchta took on many hybridized forms, and that the transition was not simply from one identity to the other in sequence. As Molly Carter points out, such polemical dualities are intrinsic to medieval culture, including within religion.¹⁴ Such dualities, as we know, allowed for the evolution and adaptation of hybrid figures such as Frau Perchta. Many might know Perchta as a “winter witch,” who in popular culture and in Alpine tourism accompanies Krampus. Yet Perchta’s history goes back much further than that of Krampus, or than Knecht Ruprecht, who does not appear in written sources until the seventeenth century as a figure in a Nuremberg Christmas procession.

One fascinating component of Perchta is certainly that, although her identity and character were transformed in the medieval and early modern periods, her existence has been preserved in the Christmas tradition, with merchandise ranging “from luggage to lingerie.”¹⁵ Citing Viktor Waschnitius (ca. 1913), Lotte Motz writes that “the name of the spirit [Perchta] has entered German speech”; Motz references Waschnitius’s indications of “Perchtennacht” in Styria, “Frauhollenabend” in the Rhöngebirge (bordering Hesse, Bavaria, and Thuringia), and “Hollenabend” in the Westerwald in Nassau, Hesse, as well as “Chrungelinacht” (indicating Chrungeli – another, less common name) – all occurring near the Epiphany and Christmas.¹⁶ The nomenclature of certain landmarks shows that “the belief in Perchta left its imprint

12 Motz, “The Winter Goddess” (see note 4), 156. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 32 and 38.

13 Kellner, “Percht,” *Enzyklopädie des Märchens*, vol. 10 (see note 2), 722. Kellner writes: “als verwandte weibliche Figuren sind aus dem deutschsprachigen Raum u. a. Stempa, Stampa, Gstampa, Posterli, Sträg(ge)le, Frau Faste, das Fronfastenwibele, die Quatemberca zu nennen; diesen ist auch die ital. Befana zuzuordnen.”

14 Cf. Molly Carter, “Perchten and Krampusse: Living Mask Traditions in Austria and Bavaria,” Ph.D. diss., National Centre for English Cultural Tradition, Sheffield, UK, 2016, 353.

15 Carter, “Perchten and Krampusse” (see note 14), 17.

16 Motz, “The Winter Goddess” (see note 4), 152. Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 17, 18, 93.

on the landscape (especially the mountainous region of central Germany).” There are the “Frau Hullibaum” trees (one in Wertheim and another in the Tarforst district of Lower Franconia), a pond named “Frau Holles Badeplatz,” (near the Main river in Lower Franconia and near the Meissner, a mountainous area in northern Hesse), and a rock called “Frau Hullistein” (near Hasloch in Lower Franconia) where apparently “she rests after having helped girls to carry their load.”¹⁷ Traditions include “the Perchtenlauf or Perchtenjagd of Salzburg and Tyrol, the Streggelejagen and Post-erlijagen of Switzerland, or the bechtelen of Switzerland and of Alsatia, the last designating either a masked procession or a feast.”¹⁸

In considering Perchta as an “embodiment” of nature, I define nature along the lines of Maurice Merleau-Ponty’s notion of a “world of perception,” as well as Merleau-Ponty’s concept of nature. Merleau-Ponty defines the world of perception in *Causeries* (*The World of Perception*, 1948) as follows:

Le monde de la perception, c’est-à-dire celui qui nous est révélé par nos sens et par l’usage de la vie semble à première vue le mieux connu de nous puisqu’il n’est pas besoin d’instruments ni de calculs pour y accéder, et qu’il nous suffit, en apparence, d’ouvrir les yeux et de nous laisser vivre pour y pénétrer. Pourtant ce n’est là qu’une fausse apparence.

[The world of perception, or in other words the world which is revealed to us by our senses and in everyday life, seems at first sight to be the one we know best of all. For we need neither to measure nor to calculate in order to gain access to this world and it would seem that we can fathom it only by opening our eyes and getting on with our lives. Yet this is a delusion.]¹⁹

The world of perception is also, “dans une large mesure ignoré” (to a great extent, unknown territory)²⁰ – even in the twentieth and twenty-first centuries. As Thomas Baldwin describes it, Merleau-Ponty rejects “the thought that science penetrates to the heart of things.”²¹ This is truly the case in medieval and early modern times,

17 Motz, “The Winter Goddess” (see note 4), 152. Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 72, 81, 89.

18 Motz, “The Winter Goddess” (see note 4), 152. See also Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 81.

19 Maurice Merleau-Ponty, *Causeries* 1948 (Paris: Editions De Seuil, 2002), here 11. See also the English translation: *The World of Perception*, trans. Oliver Davis (1948; London and New York: Routledge, 2004), 31.

20 Merleau-Ponty, *Causeries* 1948 (see note 19), 31.

21 Thomas Baldwin, “Introduction,” *The World of Perception* (see note 19), 13.

during which the heart of human knowledge recognized magic as an influence on everyday life.²²

In *Nature: Course Notes from the Collège de France*, Merleau-Ponty explains in a lecture in his second course (“The Concept of Nature, 1957–1958: Animality, the Human Body, and the Passage to Culture,”) “L’*Umwelt* ne se presente pas devant l’animal comme un but, il n’est pas present comme une idee, mais comme un theme qui hante la conscience” (*Umwelt* is a theme [. . .] that haunts consciousness).²³ In this lecture series, which was meticulously recorded and annotated by Merleau-Ponty’s student Dominique Séglaard, Merleau-Ponty investigates further the research that he began in *Causeurseries* (*The World of Perception*). His phenomenological philosophy of nature as a blend of human perception (seeing and sensing) and the perceived object (what we see or sense) is influenced here by Jakob Johann von Uexküll’s notion of *Umwelt* (ca. 1908–1909, *Umwelt und Innenwelt der Tiere*) as a world which exists not *a priori*, but as a world perceived by a living being as its surroundings. Understood as an embodiment of nature surrounding human beings of medieval and early modern Germanic and northern European culture, Perchta becomes a perception of *Umwelt*. Merleau-Ponty lingers on Uexküll’s *Umwelt* as a notion that not only impacted Heidegger’s ontological philosophy of nature, but as one that has a more lasting significance, continuing to influence how philosophers understand the concept of nature.²⁴

Nature as *Umwelt* that, according to Merleau-Ponty, “hante” (haunts) the human consciousness is a fitting way to define nature in terms of Perchta. By this I mean that despite attempts to universalize and institutionalize religion, the human mind maintained its connection to nature through converted pagans’ lingering reverence and reification of figures including Perchta, even when they were no longer officially recognized as deities. Most likely, the Church was obliged to make concessions that allowed for the continued existence of Perchta not as the devil or demonic but adapted into a punisher of sinful children. This way, newly converted peoples could retain their folk beliefs and customs that honored nature within the

22 Cf. *Magic and Magicians in the Middle Ages and the Early Modern Time: The Occult in Pre-Modern Sciences, Medicine, Literature, Religion, and Astrology*, ed. Albrecht Classen. Fundamentals of Medieval and Early Modern Culture, 20 (Boston and Berlin: Walter de Gruyter, 2017).

23 Maurice Merleau-Ponty and Dominique Séglaard, *La Nature: Notes, cours du Collège de France* (Paris: Éditions du Seuil, 1993), 233. See also the English translation, *Nature: Course Notes from the Collège de France*, ed. Dominique Séglaard, trans. Robert Vallier (1968; Evanston, IL: Northwestern University Press, 2003), 178.

24 Cf. Albrecht Classen’s contribution to this volume, “Nature and Human Society in the Pre-Modern World: The Physical Reality within the Global Context: Medicine, Philosophy, Literature, Science, and the Arts.”

Catholic dogmatic paradigm. Descended from Proto-Indo-European deities, Perchta embodies a perceived world around the originators of her persona.

Merleau-Ponty's understanding of nature, in the words of B. E. Bannon, reveals "the mutual imbrication of the subject and object within perception" through an understanding of nature in terms of "flesh," and reality as "the sensual one in which we live."²⁵ If we consider the physical traits of Perchta, we see characteristics that are animal and very much of the flesh. So, too, can we view the practice of "feeding" Perchta or leaving plates of food outside for Perchta – the custom reflects consciousness of a physical imbrication (connection) of subject (humans) and object (nature). Motz writes, "In Villnös near Bozen in South Tirol it is dumplings and eggs, placed on rooftops in the night before Epiphany; during the same night the Stampa of Wälschnoven receives a gift named after her, *Gstampanudeln*, and food awaits Frau Bert in Möldorf of Bavaria on Shrove Tuesday on the kitchen table."²⁶ In most religions and cultures, food and eating become a ritualistic practice that is arguably connected to a primal nature. A second aspect of the "flesh" that Perchta reflects is her association with fertility. Waschnitius references a well near the Meissner, where women who immerse themselves are granted fertility.²⁷ Furthermore, "Berchta shares a cave in Tyrol with unborn babies and those who want a child must seek her in her dwelling place."²⁸ It was said that Perchta cares for infants who died before they were able to be baptized.²⁹

Furthermore, I argue that Perchta's preservation and the adaptation of her roles in society in the medieval and early modern world reflect other aspects in the development of philosophy present in Merleau-Ponty's genealogy of the ontology (metaphysics) of nature, including Merleau-Ponty's takeaways from Aristotle, Descartes, Schelling, Fichte, Bergson, Sartre, Husserl, Leibniz, and Heidegger. Merleau-Ponty reads the philosophies of the aforementioned predecessors, among others, in terms of being and nature, thus tracing developments of the concept of nature in human consciousness throughout history. I will therefore return to Merleau-Ponty's phenomenology of nature when it is relevant to the discussion of Perchta. Here in Robert Vallie's words, Merleau-Ponty "examines the emergence of the human body

²⁵ Bryan E. Bannon, "Flesh and Nature: Understanding Merleau-Ponty's Relational Ontology," *Research in Philology* 41.3 (2011): 327–57; here 328.

²⁶ Motz, "The Winter Goddess" (see note 4), 152.

²⁷ Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 89.

²⁸ Motz, "The Winter Goddess" (see note 4), 155. Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 35.

²⁹ Motz, "The Winter Goddess" (see note 4), 155. Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 18.

at the intersection of Nature and logos.”³⁰ In another study entitled *Le visible et l'invisible*, Merleau-Ponty proposes to do a psychoanalysis of Nature: “Faire une psychanalyse [sic] de la Nature: c’est la chair, la mère” (“it is the flesh, the mother”).³¹ Here Merleau-Ponty is not only invoking the German concept of *Gestalt* (in this case the Self) as simply the self in the raw and primordial world, as he discusses earlier in the text,³² but is also identifying a maternal aspect inherent to Nature.

Perchta’s maternal embodiment of nature thus represents, invokes, and harks back to an ancient connection between humans and nature. In the Introduction to his second course, Merleau-Ponty describes Nature as follows: “C’est à la fois ce qu’il y a de Plus vieux, et c’est quelque chose de toujours nouveau” (“It both partakes of the most ancient, and is something always new.”)³³ The German medieval scholar Thomas Leek also considers the maternal aspect in the origins and various hybrid identities of Perchta in “Holda: Between Folklore and Linguistics” (2008). Leek finds that Jacob Grimm’s fairy tales and folklore investigations are responsible for much of the lasting knowledge of Perchta and Holda as well as their characteristics – Grimm compares them to Roman goddesses. Like Wotan, Grimm says that Holda flies through the air with other gods on the wild hunt and calls her “das amt

30 Robert Vallie, “Translator’s Introduction,” Merleau-Ponty, *Nature* (see note 23), 3.

31 Merleau-Ponty, *Le Visible et l’invisible; Suivi de Notes de Travail* (Paris: Gallimard, 2019), 315. See also the translation: *The Visible and the Invisible*, ed. C. Lefort, trans. A. Lingis (1964; Evanston, IL: Northwestern University Press, 1968), 267.

32 Merleau-Ponty, *Le visible et l’invisible* (see note 31), 243. Merleau-Ponty writes, “‘Etwas’ le plus simple – la *Gestalt* tient la clef du problème de l’esprit voir Productive Thinking de Wertheimer* pour déterminer en quel sens la *Gestalt* contient et ne contient pas les significations du plus haut degré. Les regards qui se croisent = eine Art der Reflexion Mai 1959 [. . .] C’est la chair des choses, déjà, qui nous parle de notre chair, et qui nous parle de celle d’autrui – Mon ‘regard’ est une de ces données du ‘sensible’, du monde brut et primordial, qui défie l’analyse de l’être et du néant, de l’existence comme conscience et de l’existence comme chose, et qui exige une reconstruction-complète de la philosophie.” Here, Merleau-Ponty is describing the Self as “The figure on the ground, the simplest ‘Etwas’ (thing; something) – the *Gestalt* contains the key to the problem of the mind [see Wertheimer’s *Productive Thinking* to determine in what sense the *Gestalt* contains and does not contain the significations of the highest degree [. . .] The looks that cross = *eine Art der Reflexion*. It is already the flesh of things that speaks to us of our own flesh, and that speaks to us of the flesh of the other – My ‘look’ is one of those givens of the ‘sensible,’ of the brute and primordial worlds, that defies the analysis into being and nothingness, into existence as consciousness and existence as a thing, and requires a complete reconstruction of philosophy.” *The Visible and the Invisible* (see note 31), 192–93.

33 Maurice Merleau-Ponty and Dominique Séglaard, *La Nature: Notes, cours du Collège de France* (see note 23), 169. *Nature: Course Notes from the Collège de France* (see note 23), 125.

einer *mütterlichen gottheit*, wie wir sie in der Nerthus und Isis kennen gelernt haben”³⁴ (a motherly deity, such as we got acquainted with in Nerthus and Isis).³⁵

Perchta's Origins

I will first look at Perchta's ancient nature and then observe how she is also something new, noting several transitions in her depiction and role in society. But in the beginning, Perchta was a direct embodiment of nature; of the perceived *Umwelt* around her originators. As Leek argues, Holda's name, like Perchta's, indicates “a prehistory of her worship in the practices of pagan German peoples.”³⁶

It is worth noting that there are many parallel figures in more ancient religions across Europe; commonalities include traits of animals and nature that reflect the human dependence on nature. Maia, a Greek nymph and Roman goddess of Spring, warmth, growth, and transformation, may have been an early predecessor of Perchta or Frau Holda, who also represents Spring. Viktor Waschnitius described Frau Holle as a vegetation spirit of fields and woods.³⁷ Early incarnations of Orcus, Maia, and Pela may have been associated as wild women and men and the wild-man festivities celebrated through the Middle Ages and Europe. Leek argues that *hulden*, *unhulden* and Holda are “reifications of a concept” of graciousness personified.³⁸ Thus, the Perchta and Holda figure dates back to antiquity but also is conceptually lodged in the human mind in its awareness of nature.

An approach to Holda and Perchta as argued by Eugen Mogk (ca. 1900) is that they are of ancient, pagan origin. Unlike Grimm, Mogk connects the name *Holda* to Germanic *helanan* and Perchta to Germanic *berganan*, both meaning covered or concealed.³⁹ This theory is supported by Hermann Güntert (ca. 1919), who sees Perchta as a goddess of death and links her to Kalypso.⁴⁰ As Leek sees it, Mogk's etymology of *hulpo* is “Indo-European,” whereas Güntert's idea is at the “latest

34 Jacob Grimm *Die Deutsche Mythologie*, 2nd ed. Vol. 1, “Holda” (1835; Göttingen: Dieterische Buchhandlung, 1884), 248.

35 Jacob Grimm, *Teutonic Mythologie*, trans. James Steven Stallybrass (1835; London: George Bell and Sons, 1882), 270.

36 Thomas Leek, “Holda: Between Folklore and Linguistics,” *Indogermanische Forschungen* 113 (2008): 312–38; here 312.

37 Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 174–78.

38 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 317.

39 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 326.

40 Hermann Güntert. *Kalypso. Bedeutungsgeschichtliche Untersuchungen auf dem Gebiet der indogermanischen Sprachen* (Halle a. d. S.: Max Niemeyer, 1919), 93.

[. . .] Proto-Germanic.”⁴¹ Leek finds a conceptual continuity between “the Gothic *unhulpons* and medieval *unhulden*.”⁴² Erika Timm established that the differences in the names of Holda, Perchta, Herodias, Frick and Wode/Gode correspond to the linguistic boundaries formed by the High German Consonant Shift; she writes, “Vielmehr muß der Kausalhintergrund unserer Gestalten ein[ander] ähnlicher sein wie der des Ober-, Mittel- und Niederdeutschen selbst” (“the casual background of our characters must be similar to that of the upper, middle, and low German dialects”).⁴³ Leek argues that such characters were all adopted into “demons of the *Spinnruhe* [sic].”⁴⁴ But as pointed out by Viktor Waschnitius, “der Besuch der Spinnstube ist nicht mythisch, das heißt, es hat mit dem Wesen dieser Dämonen nichts zu tun, sondern bietet nur den Schauplatz ihres Auftretens vor den Menschen” (“the visit to the spinning room is not mythic; that is, it has nothing to do with the character of these demons, but rather only offers the stage for their appearance”).⁴⁵ Leek is hesitant to say “whether the persona of Holda is a prehistoric or medieval invention,” but finds that Holda is “descended from a pagan divinity” given the etymological relationship “between Holda and *unhulpons* in the German and Gothic adjectives *hold* and *hulps*.”⁴⁶

Many gods that resemble both humans and animals may have been inspired by the aurochs, an extinct cattle species that is regarded as the predecessor to certain domestic cattle breeds, including the Eurasian aurochs, known as Taurine cattle (“Hausrind” or “*Bos taurus*”). The aurochs is depicted in Paleolithic cave paintings, Neolithic petroglyphs, Ancient Egyptian reliefs, and Bronze Age figurines. It symbolized power, sexual potency, and prowess in religions of the ancient Near East. Its horns were used in votive offerings, as trophies and drinking horns, and they were often exhibited in Roman colosseums. Young men of the Germanic tribes would kill the aurochs and present horns to their communities, through which they earned great honor.⁴⁷ The popularity of the horns among nobility led to their extinction – the gilded drinking horn of the last recorded aurochs, which died in 1620 and belonged to Sigismund III of Poland, is now on display in the Royal Armoury, a museum in the Royal Palace of Stockholm. In the *Nibelungen-*

41 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 327.

42 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 328.

43 Erika Timm, *Frau Holle, Frau Percht und verwandte Gestalten. 160 Jahre nach Jacob Grimm aus germanistischer Sicht betrachtet* (Stuttgart: S. Hirzel, 2003), 20.

44 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 330.

45 Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 166.

46 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 330–31.

47 Cf. Kurt Linder, *Die Jagd der Vorzeit. Geschichte des deutschen Weidwerks*, 1 (Berlin: Walter de Gruyter, 1937), 417.

lied, in Adventure XVI, “How Siegfried was slain,” four aurochs are among many beasts that he slays in his hunting frenzy:

Swaz ir der bracke ersprancte, die sluoc mit sîner hant
 Sîvrit der küene, der helt von Niderlant.
 sîn ross lief sô sêre, daz ir im niht entran.
 den lop er vor in allen er an dem jegde gewan.
 Er was in allen dingen biderbe genuoc.
 tier was daz êrste, daz er ze tôde sluoc,
 ein vil starkez halp, mit der sînen hant.
 dar nâch er vil schiere einen ungefügen lewen vant
 Dô den der bracke erspracte, den schôz er mit dem bogen
 eine starke strâle hete er dar in gezogen.
 der lew lief nâch dem schuzze wan drier sprünge lanc.
 Dar nâch sluoc er schiere einen wisent und einen elch,
 starker uower viere und einen grimmen schelch.
 sîn ross in truoc sô balde, daz ir im niht entran.
 hirze oder hinden kunde im wênc engân.
 Einen eber grôzen, den vant der spûrhunt.
 als er begunde vliehen, dô kom an der stunt
 des selben gejeides meister. er bestuont in ûf der slâ.
 da swîn vil zorneclîchen lief an den helt sâ.⁴⁸

[The animals that the hound scared up were killed by Siegfried's own hand, the hero of Netherland. His horse was so swift that nothing could outrun it. He was declared the best of all on that hunt. He was talented in everything he tried. He was the first to kill an animal with his own hands, a very large wild horse. Right after that he encountered a lion. When the hound had flushed him out, he shot him with a bow, using an especially large arrow. The lion managed another three steps before he fell dead. The animals that the hound scared up were killed by Siegfried's own hand, the hero of Netherland. His horse was so swift that nothing could outrun it. He was declared the best of all on that hunt. He was talented in everything he tried. He was the first to kill an animal with his own hands, a very large wild horse. Right after that he encountered a lion. When the hound had flushed him out, he shot him with a bow, using an especially large arrow. The lion managed another three steps before he fell dead. The other hunters praised Siegfried for that shot. After that he killed a bison and a moose, four strong aurochs, and a dreadful elk.]⁴⁹

Siegfried's hunting frenzy in fact leaves his companions jealous of his feat:

⁴⁸ *Das Nibelungenlied*, ed. and explained by Hermann Reichert. Nach der St. Galler Handschrift (Berlin and Boston: Walter de Gruyter, 2005), 152–53, vv. 931–935.

⁴⁹ *The Nibelungenlied with the Klage*, trans. William Whobrey (Indianapolis, IN, and Cambridge: Hackett Publishing, 2018), 79, vv. 935–37.

Dô sprächen sîne jegere: “mügez mit *fuoge* wesen,
 sô lât uns, hêr Sivrit, der tiere ein teil genesen.
 ir tuot uns hiute lære den berc und ouch den walt!”
 des begunde smielen der degen küene unde balt.⁵⁰

[His hunters said, “If it wouldn’t dishonor you, Lord Siegfried, we ask that you leave us a few animals. You’re clearing the mountains and the forests today.” That made the brave and daring warrior smile.]⁵¹

In this cynicism, there is perhaps some awareness of the endangerment of species such as the aurochs through over-hunting. Although this is not overtly criticized in the *Nibelungenlied*, one would certainly point to this as a transgression against nature from the perspective of a present-day ecological reading. The reverence of Perchta shows a deeper respect for such creatures as the aurochs, possibly among the lower classes of citizens who were not hunting them to extinction for sport and for prized horns. But Siegfried’s true downfall is not his feverish zeal in hunting, nor his thirst after all of this activity, but a matter of trust and betrayal. After he kills all of these animals, he goes after the final and most daring kill – a menacing bear. When Hagen of Troneck challenges him to a race, which Siegfried wins, he seeks to finally quench his thirst. When Gunther is drinking from a brook, Siegfried wants to do the same, but then Hagen quickly steals his sword and bow, and pierces him through the heart with his own spear.⁵² Although Siegfried’s death is not directly connected to his feverish hunting, it is nonetheless the last of numerous killings within this bloody chapter of the *Nibelungen*.

The name aurochs is derived from “ochs” (ox) or wild cattle and the Futhark rune Uruz (𐌺) or “ūr” (Old Nordic or Old English) or “uraz” (Gothic), a rune which represents the aurochs. The Murboden cattle breed also exhibits sporadic introgression of female European aurochs into domestic cattle in the Alps, thus it is a possible inspiration for a horned Perchta. Domestic cattle continued to diminish in both body and horn size until the Middle Ages, and thus any costumes would probably feature smaller horns. In Polish folklore, Turoń is a festive monstrosity in the form of a black, horned, and shaggy animal with a flopping jaw. Like Perchta, its appearance can be noticed at folk events during the period after Christmas, yet most likely in times of Carnival and before Lent begins. The name is derived from the word “tur,” similar to “ur,” meaning aurochs.

⁵⁰ *Das Nibelungenlied*, ed. Reichert (see note 48), 153, v. 937.

⁵¹ *The Nibelungenlied*, trans. Whobrey (see note 49), 79, v. 940.

⁵² *Das Nibelungenlied*, ed. Reichert (see note 48), 157, vv. 975–77. *The Nibelungenlied*, trans. Whobrey (see note 49), 82, vv. 978–81.

There are also many goddesses including the Greek Athena and the Proto-Celtic Epona with connections to horses. The Norse jötunn and goddess Gerðr's name is etymologically associated with the earth and is described in the *Poetic Edda* (thirteenth century) within the medieval Icelandic *Codex Regius*, thought to be written in the 1270s. As Motz writes, "Most of our knowledge of Germanic myth is derived from the Old Icelandic texts and especially from the Eddas," including figures such as "The Lady of Wild Beasts' of ancient civilizations."⁵³

Perchta's Medieval and Early Modern Identities

The belief in Holda as a spinning room mistress indicates a new identity for Perchta, and dates back to Bishop Burchard of Worms's *Corrector et medicus* within the *Decretorum libri viginti* from around 1000. Here, as often with Perchta, Holda does not represent one spirit but a plurality of souls. Burchard writes,

Credidisti ut aliqua femina sit quae hoc facere possit quod quaedam, a diabolo deceptae, se affirmant necessario et ex praecepto facere debere, id est cum daemonum turba in similitudinem mulierum transformatum, quam vulgaris stultitia holdam vocat, certis noctibus equitare debere super quasdam bestias, et in eorum se consortio annumertam esse?

[Have you believed that some woman exists, who can do this, that certain women, deceived by the devil, confirm themselves, that by necessity and command, they, when a mob of demons transformed into a likeness of a woman, whom the folly of the common folk calls Holda, ought to ride on certain nights on certain beasts, and to be numbered in their company?]⁵⁴

The priest Wulfila's (Ulfilas') fourth-century Gothic translation of the Bible mentions female demons as *unhulpons*, and later groups of Hulden and Unhulden are discussed by Berthold of Regensburg (c. 1210-1272). Leek distinguishes Norse *hulden* from Gothic *unhulpons* and contends that "a folk deity named Holda must have been present in the spiritual life of medieval Germans."⁵⁵ In the thirteenth century, a German Cistercian monk Rudolfus (Rudolf of Fulda) described the tradition of setting a place at the table for Mistress Holda on the night of Christ's nativity.⁵⁶ This is an interesting example, because here Holda seems to be more benevolent than mischievous or evil – in fact, in Silesia at some point between

⁵³ Motz, "The Winter Goddess" (see note 4), 151.

⁵⁴ Burchard of Worms, *Patrologia Latina* 1140.961D–962A. Quoted in Leek, "Holda: Between Folklore and Linguistics" (see note 36), 315–16.

⁵⁵ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 319.

⁵⁶ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 316.

1236 and 1250 she is regarded by Rudolfus as the queen of heaven: Rudolfus writes, “In nocte nativatis Christi ponunt regine celi, quam dominam Holdam vulgus appellat, ipsa adiuvet” (“On the night of Christ’s nativity they set (a place at the table) for the queen of heaven, whom the people call Mistress Holda, so that she might aid them”).⁵⁷

Holda also appears in medieval Yiddish literature, indicating presence in traditions and customs across religions and cultures, and she shares, in turn attributes with the Russian Baba Yaga.⁵⁸ Timm transliterates a Yiddish text into Latin characters: “Vèr Holde, gèt mich orlof. / dat ich ga in urèn hof / ind’ brèche èn blat, dat mich si got” (“Frau Holle, give me permission that I may go into your court and break a leaf which would be useful to me”).⁵⁹ Here again, we see that the sacrifice of food had more to do with Winter solstice than the feast of the Nativity, and that it is unlikely that Holda was an adaptation of the Virgin Mary but instead of various goddesses. As Timm notes, “at the latest since the 13th century, Jews of central Europe adopted German folk beliefs to an amazing extent.”⁶⁰ The folk beliefs shared across people belonging to different religious cultures coexisting in the same region suggests an acknowledgment of a more primordial connection to nature through traditions and figures such as Holda.

Associations with the wild hunt, the spinning room, and household work, and with the dead all came later, according to Leek, than forgotten characteristics of her pagan forerunner. Leek argues that “the name *Holda* must have retained religious connotations when new myths began to accrue around the Middle Ages. The linguistic evidence indicates that *hold* was a sacred power, which, though abstract, was reified into a deity, whose character as a rewarding and punishing goddess is reflected in her name, for as demonstrated Germ. *Hold* relates to concepts of graciousness and loyalty.”⁶¹ In a sense, however, most pagan religions have multiple evocations of this figure: many pagan deities are both rewarding and punishing, as is God in Judeo-Christian monotheism.

The presence of Perchta in Icelandic culture, mentioned above when discussing Perchta’s origins, is also evidenced in the *Laxdæla saga* (ca. 1250), a chronicle of the people of western Iceland from the ninth to eleventh centuries. In the saga, Án hrísmagi dreams twice of a woman with a knife, and Thomas Hill (2007) has argued convincingly that this woman represents Perchta and thus the saga is the “earliest

57 Quoted in Joseph von Klapper, “Deutscher Volksglaube in Schlesien in ältester Zeit,” *Mitteilungen der Schlesischen Gesellschaft für Volkskunde* 17 (1915): 2–57; here 36.

58 Cf. Leek, “Holda: Between Folklore and Linguistics” (see note 36), 312.

59 Timm, *Frau Holle, Frau Percht und verwandte Gestalten* (see note 43), 18–19.

60 Timm, *Frau Holle, Frau Percht und verwandte Gestalten* (see note 43), 20.

61 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 334.

full narrative account of Perchta in her role as judge and healer,” much “earlier than any of the narratives that [John B.] Smith or Grimm cite.”⁶² The function of the woman in Án hrísmagi's dreams serves as a foil for the main characters' dilemmas. Hill argues that Án “fulfills a role similar to that of the ‘side-kick’ in modern popular fiction, movies, and television.”⁶³ Hill finds that “just as the great warriors and heroes Kjartan and Siguror are loved, but eventually entrapped and killed by quasi-divine beautiful Valkyrie women, the lesser figure Án is both punished and healed by the grotesque and comic Perchta-like troll woman.”⁶⁴ Just before his death, Kjartan speaks with Án:

Um nóttina eptir lét Án illa í svefni, ok var hann vakiðr. Peir spurð u, hvat han hefð i dreymt. Hann svarar: ‘Kona kom at mér, ópekkilig, ok kippði mér á stökk fram. Hon hafði í hendi skálm ok trog í annarii; hon setti fyrir brjóst mér skálmína ok reist á mer kviðinn allan ok tók á brott innýflin ok lét koma í staðinn hrís; eptir pat gekk hon út, segir Án. Peir Kjhartan hlógu mjok at drauminum ok kváðu hann heita skyldu Án hrísmaga; prifu peir til hans ok kváðusk leita skyldu, hvárt hrís væri í maganum.’⁶⁵

[That night, Án the Black was very restless in his sleep, so they woke him up. They asked him what he had been dreaming. “A horrible woman came and dragged me to the edge of the bed,” he replied. “She had a huge knife in one hand and a trough in the other: She plunged the knife into my breast and ripped my whole belly open and pulled out all my entrails and stuffed brushwood in their place. Then she went away.” Kjartan and the others laughed aloud at the dream and said he ought to be called Án Brushwood-Belly. They caught hold of him and said they wanted to feel if there was any brushwood in his stomach.]⁶⁶

Kjartan, of course, decides to disregard Án's dream and to travel as previously planned and without a larger company. After the fight and death of Kjartan, Án dreams of the woman again, but the circumstances are different and allow Án “to return to normal life,” according to Hill. After a swooning sleep comes over him, Án tells of the frightened vigil at “Sælingsdaltungu” (Saelingsdale Tongue),

62 Thomas D. Hill, “Perchta the Belly Slitter and Án hrísmagi: ‘Laxdæla saga’ cap., 48–49,” *The Journal of English and Germanic Philology* 106.4 (2007): 516–23; here 523. See also John B. Smith, “Perchta the Belly–Slitter and Her Kin: A View of Some Traditional Threatening Figures, Threats, and Punishments,” *Folklore* 115 (2004): 167–86.

63 Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63), 521.

64 Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63), 521.

65 *Laxdæla saga*, ed. Einar Ól Sveinsson (Reykjavik: Hið íslenska fornnritafélag, 1934), Íslensk fornrit V, Cap 48, 149. Quoted in Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63): 516.

66 *Laxdæla saga*, trans. Magnus Magnusson and Hermann Pálsson (Baltimore, MD: Penguin, 1969), 171. Quoted in Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63): 517.

“Pá dreyndi mik in sama kona ok fyrr, ok pótti mér hon nú taka hrísit ór maganum, en lét koma innyflin í staðinn, ok varð mér gott við þat skipti.” Síðan váru bundin sár pau, er Án hafði, ok varð hann heill ok var síðan kallaðr Án hrísmagi.⁶⁷

[“Then I dreamt of the same woman as before; and in my dream she now took the brushwood from my belly and put my entrails back instead, and at this change I felt much better.” Án’s wounds were now dressed, and he recovered completely; from then on he was known as Án Brushwood-Belly.]⁶⁸

Despite the aurochs being an early inspiration, by the early Middle Ages Perchta was associated with a goat more than any other animal. Motz also indicates dogs – because Perchta and Holda “developed from guardians of nature and of animals, found among hunting civilizations, into a more complex godhead,” and humans have long had a symbiotic relationship with dogs – as well as the ibex due to its Alpine distribution, a donkey, or a horse (Percht is also close to “Pferd,” the German word for horse).⁶⁹ Yet the verdict is clear when it comes to Perchta: “Dame Perchta and Luzia sometimes appear as goats; a girl impersonating Frau Holle in Leobschütz is designated as ‘Himmelsziege,’ ‘celestial goat;’ the Posterli of Switzerland may be a goat, but is also seen as a donkey or witch.” There is also Bergda, “a hairy monster near Sargfelden,” and “Stampa may appear with a horse’s head before the villagers.”⁷⁰ The animal traits of Perchta are thus from animals of the hunt (horses, dogs), pastoral life (goats, horses), and with birds of prey (i.e., the beak, discussed elsewhere in this chapter).

The time from Christmas to Epiphany was holy in pagan cultures, for example in the pre-Christian Slavic festival of Koliada. Thus, the Yule goat, which appears in ancient Scandinavian and German traditions, is also a predecessor for Perchta and is carried on in traditions such as the Finnish figure of the Joulu-pukki – a person often dresses as this goat in exchange for offerings of leftover Christmas food (just as Perchta was offered plates of food, left outside of one’s domicile). In its honoring of the return of the sun, this could also be seen as a predecessor of Santa. There is an Italian counterpart in the Badalisc, a mythical goat-like creature in the southern Alps. Thus, Perchta and other figures derive

⁶⁷ *Laxdæla saga*, ed. Sveinsson (see note 65), cap. 49, 155. Quoted in Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63), 517.

⁶⁸ *Laxdæla saga*, trans. Magnusson and Palsson (see note 66), 176. Quoted in Hill, “Perchta the Belly Slitter and Án hrísmagi” (see note 63): 517.

⁶⁹ This was pointed out to me by Fidel Fajardo-Acosta, who also compared Perchta to Grendel’s mother in *Beowulf*. See Fajardo-Acosta, “Unnatural Humans: The Misbegotten Monsters of *Beowulf*,” in this volume.

⁷⁰ Motz, “The Winter Goddess” (see note 4), 156; Cf. Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 41, 74, 102, and 119.

from ancient pagan beliefs in Proto-Indo-European culture as early as 4500 B.C.E. and subsequent Germanic cultures of the pre-Roman Iron Age. It is also interesting that, despite attempts from the Church and religious authorities to equate these figures with the devil, beliefs and traditions including Perchta were preserved and adapted until the present day. As with Perchta and Holda, such figures were a valued part of cultural traditions and thus they could not be made into the devil proper, but only demonized – and eventually turned into witches or simply old magical women who punish sinful and naughty children. An early modern instance of mythical, part-human creatures might be Shakespeare's depiction of the satyrs in *The Winter's Tale* (1611) – the "Saltiers" have properties of both wild men and satyrs. Like other figures in folklore including Santa, Holda carries a bag – much like the bag Grendel carries with which to feed its mother.⁷¹

The earliest known allusion to Perchta is from the eleventh-century *Monseer Glossen*, a collection of polemical commentaries, with the first reference to "Giperch-tennacht" or "Perch-Tag" (Perch-Day), which is explicitly identified as Epiphany.⁷² Some of the earliest references to Perchta are medieval ecclesiastical writings describing the folk belief of the Wild Hunt, in which Perchta flies through the air with other pagan goddesses or a host of beings. The Wild Hunt often occurs in January. In his *Tractatus de superstitionibus, contra maleficia seu sortiglia quas hodie vigent in orbe terrarum* (1515), Martinus de Arles y Andosilla (Martin of Arles) numbers Perchta among the airborne host of demonic beings including Diana and Herodia who fly abroad on January 5, and mentions that people leave tables set with food and drink for her.⁷³ These forms of homage and paying respect, which might loosely be considered worship, symbolize thankfulness for what nature provides. Perchta is also described as leading a host of spirits – sometimes demons, but sometimes the souls of the dead or even dead children.

The worship or feeding of Perchta, essentially a reverence of the seasons and an acknowledgment of a pastoral dependence on nature, concerned the church as a prolonged connection to a false idol. Pagan celebrations of nature and the seasons

71 Cf. Marianne Rumpf, "Frau Holle," *Enzyklopädie des Märchens*, ed. Rudolf Wilhelm Brednich, Hermann Bausinger, Wolfgang Brückner, Lutz Röhrich, and Rudolf Schenda. Vol. 5 (Berlin: Walter de Gruyter, 1987), 160–65; here 160.

72 Hans Schuhladen, "Zur Geschichte von Perchtenbrauchen im Berchtesgadener Land, in Tirol und Salzburg vom 16. bis zum 19. Jahrhundert. Grundlagen zur Analyse heutigen Traditionsverständnisses," *Bayerische Hefte für Volkskunde* 11 (1983–1984): 1–29; here 24.

73 Marianne Rumpf, "Perchta in der Sage und der mittelalterlichen Quellen," *Probleme der Sagenforschung: Verhandlungen der Tagung veranstaltet von der Kommission für Erzählforschung der Deutschen Gesellschaft für Volkskunde e. V. vom 27 September bis 1 Oktober 1972 in Freiburg in Breisgau*, ed. Lutz Röhrich (Freiburg i. Br.: Forschungsstelle Sage, Deutsche Forschungsgemeinschaft, 1973), 122–38; here 130.

conflicted with Christian holidays and represented a refusal to convert and pay taxes to the church by people who lived in remote areas and retained traditional pagan beliefs. *Perchten* (pl.) are personified as forces of nature in identities such as “Winterdämonen,” wild women of the mountain forests, or in other cases as brighter ushers of spring. I will also discuss Frau Holle or Frau Holda, whose name indicates protection. Like *Perchta* or *Bertha*, there are several cognate variations of the name, but *Holda* can be generally understood as a more northern iteration of *Perchta*, i.e., in Middle Germany rather than Upper Germany.

The idea of slicing bellies of disobedient children dates back to the fourteenth century. A pair of woodcuts published in Augsburg, Bavaria, titled “Die Butzen-Bercht” and “Der Kinderfresser” and attributed to Albrecht Schmidt, depict an old, hunched-over woman with snot dripping from her nose and a basket full of kidnapped children. The woodcuts were likely first published in the late sixteenth or early seventeenth centuries and mass-produced in the seventeenth.⁷⁴ The *Butzen-Bercht* makes many threats to naughty children, concluding with a word of caution: “Drum seydt gehorsam, still, gesellt euch zu den Frommen, Daß ihr nicht dürft in Korb der Butzen-Berchte kommen” (Therefore be obedient, stay quiet, keep company with the pious, That you may not have to come into the basket of the *Butzen-Berchte*).⁷⁵ Carter traces many identities of *Perchta*: as a leader of a night-faring supernatural host (i.e., Burchard, Vintler), as allegorically represented as *Domina Perchta*, *Luxuria*, and *Frau Welt* (Henry of Rimini), as belly-slitting *Kinderschreck* (including Iron Berta, *Frau Faste*, *Spinnstubenfrau*, and *Butzenbercht*), and as the Leader of the Wild Hunt and *Kinderseelenschar*.

Henry of Rimini’s *Tractatus de septem vittis* (thirteenth century) juxtaposes *Perchta* to the Virgin Mary, “complaining that young people are in the Devil’s service; they prefer dancing to church, and sing about *Domina Perchta* instead of saying the Ave Maria.”⁷⁶ Henry describes *Perchta* as having a seductive appearance: “Sicut domina Perchta, quae cum deberet intrare cubiculum suum et orare deum in die dominica, vadit hue et illuc sicut Musca ostendens vultum pictum et pulchra vestimenta tendens laqueos ad capiendum animas invenum”⁷⁷ (“*Domina Perchta*, who, instead of retiring to her chambers to pray to God on the day of the Lord, goes hither and thither like a fly [. . .] showing her painted face and her

74 Cf. Carter, *Perchten and Krampusse* (see note 14), 76.

75 Text accompanying the Augsburg woodcut, late sixteenth or early seventeenth century. Translated into English by Cynthia Dyre-Moellenhof for Molly Carter, appearing in *Perchten und Krampusse* (see note 14), Appendix B, 347–49.

76 Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 60.

77 Cited in Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 60.

beautiful clothes, [and] sets a snare in order to entrap the souls of young people").⁷⁸ The *Encyclopädie des Märchens* notes, "Eine Domina Perchta erscheint im dreizehnten Jahrhundert im Kontext eines Traktats über die sieben Hauptlaster aus Oberaltaich. P. wird hier als Teufels- und Lastergestalt geschildert, die für die Luxuria und die ihr untergeordneten Laster steht und insofern mit allegorischen Figuren wie Frau Welt (cf. Fortuna) vergleichbar ist" ("Domina Perchta appears in a thirteenth century treatise on the Seven Deadly Vices from Upper Altaich. Perchtra is here portrayed as a devilish and sinful figure that represents Luxuria and the vices that fall under her, comparable to allegorical figures like Frau Welt [cf. Fortuna]").⁷⁹ Frau Welt reflects associations of both *vanitas* and *memento mori* in thirteenth century iconography in cathedral architecture.⁸⁰ Here, the temptations of the world contrast with the purity of the Church. A statue in the portal of the Worms Cathedral (ca. 1300) portrays Frau Welt "as a crowned woman from the front, but her back is rotted away, infested with what appear to be snakes, worms, and toads, symbols of evil and sin as well as death and decay."⁸¹ Kathleen Cohen explains that this motif was popular in medieval Germany, citing a panel in Minden from ca. 1383, showing Frau Welt next to Death with his scythe and bearing the inscription "Vanitas vanitatum."⁸² This phrase comes from a famous biblical passage taken from Ecclesiastes ("vanitas vanitatum omnia vanitas" – vanity of vanities; all is vanity), often cited to affirm the emptiness of earthly concerns and the ephemeral character of the joys and glories achieved in the material world. Thus, whereas Perchta originated as a celebration of nature and of the Earth, the Church identified the bodily and earthly as sinful and thus associated Perchta's character with other pagan deities and with Satan. For Marianne Rumpf, Domina Perchta, Frau Welt, and Luxuria are metonyms for human society from the Middle Ages to the Baroque.⁸³

The notion of death in contrast to life as sinful reflects a consciousness of life's finitude that is also reflected in Perchta's transformation into a figure of death rather than one of life. This contrast also reflects transforming ideas about nature with humanist conceptions, as with Immanuel Kant. Merleau-Ponty writes

⁷⁸ Quoted in Carter, *Perchten and Krampusse* (see note 14), 354.

⁷⁹ Cf. Kellner, "Percht," *Enzyklopädie des Märchens*, vol. 10 (see note 2), 722.

⁸⁰ Cf. Carter, *Perchten and Krampusse* (see note 14), 353.

⁸¹ Carter, *Perchten and Krampusse* (see note 14), 355.

⁸² Kathleen Cohen, *Metamorphosis of a Death Symbol: The Transi Tomb in the Late Middle Ages and the Renaissance*. California Studies in the History of Art, 15 (Berkeley, CA: University of California Press, 1973), here 81.

⁸³ Marianne Rumpf, "Luxuria, Frau Welt und Domina Perchta," *Fabula* 31 (1990): 97–120; here 117.

about “finality” as a human concept and thus a human bearing on nature: “Le véritable pays de la finalité, c’est l’homme intérieur: comme *Endzweck*, comme ‘but final’ de la Nature, en tant qu’il n’est pas Nature mais pure liberté sans racine. C’est la position du devoir et de la liberté qui achève cette finalité en enlevant l’homme à la causalité naturelle. Si je ne peux plus agir selon le devoir et la liberté, il n’y a plus alors que démonologie et grouillement de forces cosmiques” (“Finality’s true country is the interior of human being: as *Endzweck*, as a ‘final goal’ of Nature, insofar as it is not Nature but pure rootless freedom. It regains the confused movement of Nature. It is the position of duty and freedom that achieves this finality by removing human being from natural causality. If I can no longer act according to duty and freedom, then there is only demonology and a swarming of cosmic forces”).⁸⁴ Similarly, once those who worshipped Perchta were converted, the freedoms of the world were less available; one also could refer here to Leek’s argument that Holda’s and Perchta’s origins lie in deities who were rewarding and punishing – hence the connection to duty and the *Spinnstube* identity that came later for Perchta and Holda.

For Merleau-Ponty, however, humanist philosophy did not fundamentally change the idea of nature: “L’idée cartésienne de Nature n’avait pas complètement été exorcisée par Kant. Certes, avec Kant, la Nature n’est plus construite par Dieu, mais par la Raison humaine. Pourtant le contenu reste identique.” (“The Cartesian idea of Nature was not completely exorcised by Kant. To be sure, with Kant, Nature is no longer constructed by God, but by human Reason. The content, however, remains identical”).⁸⁵ Despite his oscillations between “la rupture avec l’attitude naturell” (“the rupture with the natural attitude”)⁸⁶ and “la compréhension de ce fondement pré-philosophique de l’homme” (“the understanding of this pre-philosophical foundation of man”),⁸⁷ Merleau-Ponty credits Husserl with a more encompassing view of nature. Perchta retains pre-philosophical components as well, despite her transformations. But for Merleau-Ponty, the trap of the human conception of nature is that “le concept de Nature est toujours expression d’une ontologie – et expression privilégiée.” (“Nature is always the expression of an ontology – and its privileged expression”),⁸⁸ and thus the idea of nature is as a leaf of Being – the human being is the point of departure for nature and is “a son

⁸⁴ Merleau-Ponty, *La Nature* (see note 23), 46; Merleau-Ponty, *Nature* (see note 23), 26.

⁸⁵ Merleau-Ponty, *La Nature* (see note 23), 59; Merleau-Ponty, *Nature* (see note 23), 36; see also the contribution to this volume by Reinhold Münster.

⁸⁶ Merleau-Ponty, *La Nature* (see note 23), 102; Merleau-Ponty, *Nature* (see note 23), 72.

⁸⁷ Merleau-Ponty, *La Nature* (see note 23), 103; Merleau-Ponty, *Nature* (see note 23), 72.

⁸⁸ Merleau-Ponty, *La Nature* (see note 23), 359; Merleau-Ponty, *Nature* (see note 23), 204.

point d'émergence dans la Nature" ("at his point of emergence in Nature").⁸⁹ Perchta, similarly, is a human creation with origins that reach back to the human's point of emergence in nature – just as much as she represents death and finality as part of nature.

The Old High German word *peraht* means 'bright' or 'shining' (*hell, glänzend*), but the name could also have Celtic influence, and others such as Eugen Mogk associate the name with the old High German verb *pergan*, meaning hidden or covered (hence the origins of the Perchta mask). "Perchta" is usually preceded by the respectful title Frau (Lady), or the Latin Domina in medieval sources. Looking at medieval and early modern references, Rumpf has identified two main types of Perchta: the bogey who inspects the spinning room and threatens disobedient children, and the leader of the Wild Hunt.⁹⁰ This Wild Hunt identity for Perchta is interesting because it reflects a Walpurgis Night belief in pagan folklore. The *Thesaurus Pauperum*, a Bavarian Manuscript from Tegernsee (1483) mentions several motifs characteristic of early modern Perchta legends for the first time, including the Wild Hunt. Interestingly, the *Thesaurus Pauperum* mentions the folktale-teller herself – an old woman who has been overheard telling children stories.⁹¹

Religious Critique: The Sinful Worship of Perchta

Hans Vintler alludes to the *canon Episcopi* from ca. 900, which is contained in Burchardt of Worms' *Libri Decretum* (1008–1012). The *canon Episcopi* was first included in Regino of Prüm's *Libri de synodalibus causis et disciplinis ecclesiasticis*, and later (after Burchardt) in adopted in Gratian's *Corpusjuris canonici* of ca. 1140. In his *Die Pluemen der Tugent*, a compendium of Tyrolean custom (completed in 1411 and printed in 1486 in Augsburg), Vintler discusses a Perchta as a false goddess. Vintler was a Tyrolean poet, and his primary source for his manuscript was the Italian *Fiore de virtù* by Tomasso Gozzadini written around 1320. In this didactic text on morality, Vintler states that "etleich gelauben an die frau, | die do haisset Percht mit der eisnen nas" (quite a few believe in the woman, who is called *Percht* with the iron nose).⁹² In the same passage, Vintler draws connections to the Devil and the false goddess Diana. Vintler writes,

⁸⁹ Merleau-Ponty, *La Nature* (see note 23), 269; Merleau-Ponty, *Nature* (see note 23), 208.

⁹⁰ Cf. Marianne Rumpf, "Perchta in der Sage und der mittelalterlichen Quellen" (see note 73).

⁹¹ Waschnitius, *Percht, Holda und verwandte Gestalten* (see note 5), 82.

⁹² Hans Vintler, *Die Pluemen der Tugent*, ed. Ignaz Zingerle. Ältere tirolische Dichter, 1 (Innsbruck: Wagner, 1874), vv. 7761–62.

und wellen vil den teufel fragen,
 wa lige golt und edel gestain.
 so haben etleich gemain
 mit der pösen Erodiana.
 so glauben vil an Diana,
 die do ain valsche gottin ist. (vv. 7735–40)

[and many wish to ask the Devil
 where gold and gemstones lie
 so have many ignoble people done
 with the evil Erodiana
 so many believe in Diana
 who is a false goddess.]

St. Emmeram of Regensburg's fifteenth-century penitential refers to Diana as well, with Perchta as one of the Three Sisters receiving food offerings and riding through the night in the company of Diana and werewolves. Like Vintler, who decries offerings to false gods, in *Die Hymelstrass* (1494), Stephanus Lanzkrana (von Landskron) condemns belief in "frawen percht," "frawn holt," "herodiasis," or "dyana" as violations of the First Commandment. In his fifteenth-century *Discipuli Sermones* (ca. 1418), Johannes Herolt of Polling censures those who still believe that Diana, commonly known as fraw Percht, travels through the darkness leading a train of women (the Wild Hunt).⁹³ As Leek notes, Holda was more consistently equated with Diana in the Middle Ages than with any other Roman goddess.⁹⁴ Motz argues that the Church equated Perchta and Holda to Diana, but that Perchta and Holda "developed from indigenous belief" of Germanic and northern European forms rather than from the Roman goddess.⁹⁵

There are further condemnations of these practices in yet more religious texts. In Martin von Amberg's late fourteenth-century *Der Gewissen Spiegel* (*The Mirror of Conscience*), which was widely read during the fifteenth century and duplicated in a 1430 Munich tract on the Ten Commandments, Martin condemns magical practices, beliefs and customs frowned upon by the Church including offerings to Perchta: "And so they also sin, who leave food or drink out for the Percht on the Percht Night, so that the year will go well and [they] will have luck in all things." It seems that the consequences for adhering to traditional Perchta customs were the most dire in the fifteenth and sixteenth centuries: a man put on

⁹³ Cf. Motz, "The Winter Goddess" (see note 4), 154.

⁹⁴ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 318.

⁹⁵ Motz, "The Winter Goddess" (see note 4), 162.

trial for witchcraft in 1630 confessed (probably under coercion) that he had followed Dame Holle on New Year's Day to the Venusberg, the mountain of the Wild Host.⁹⁶ Similarly, a woman was exiled from Bern in the sixteenth century for having admitted to riding with "frow Selden" in the "wüttisheer."⁹⁷

In the late Middle Ages, when allegorical treatment of moral issues was widespread in religious and secular writing, vanity and pride are connected with Perchta in *fabulae*, *exempla*, and *Lasterlehren* (teachings about vice). The earliest source featuring the name "Domina Perchta" and linking it to Perchta's role as *Kinderschreck* is a thirteenth-century treatise on the seven deadly sins, *Tractatus de septem vitiis* from Oberaltaich, Bavaria.⁹⁸ In this treatise, *Berchten mit der langen Nase* [*Berchten* with the long nose] from the Tyrolean poem of 1393 is cited in conjunction with Bible verses, *exempla* and *fabulae* to illustrate the vices.

The description of the nose is repeated in other texts and seems to be a dominating physical trait of Perchta. One notices this feature is not so human, but rather more like the beak of a bird. In addition to St. Emmeram of Regensburg's reference to Perchta's iron nose, in a poem from Tyrol ca. 1393, a father threatens his child with the horrid "*Berchten mit der langen Nase* [*Berchten* with the long nose]," who will come after him if he fails to clean his plate. Martin Crusius and Sebastian Franck (both sixteenth century) refer to her as "Bercht, fera Berta" or "eysene Berta" (Iron Berta). In Vintler's *Pluemen der Tugent*, the accompanying illustration attributes Perchta with a long, blue nose.⁹⁹ Martin von Ambergs "Gewissenspiegel" (end of the fourteenth century) also indicates the "berichte mit der eyserein [sic] (eisernen) nasen."¹⁰⁰ Such examples of Perchta are "Schnabel-perchten" or "beak Perchtas," hence the incorporation of large noses and beaks into masks in Salzburg from at least the eighteenth century until the present day. The mask tradition of "mumming" is native to Bavaria and Austria, and is a mostly rural phenomenon in contrast to the urban nature of Krampus.

Bavaria and Austria have a long-intertwined history, hence the continuity in Perchta's identity within this area. Following its settlement by Celts around 800 B.C.E. and Romans at the end of the first century B.C.E. Austria became a dominant power in the Middle Ages under the Hapsburg monarchy established in 1278, which ruled most of Europe for the next five-hundred years. Salzburg re-

⁹⁶ Waschnitius, Percht, Holda und verwandte Gestalten (see note 5), 87. Cf. Motz, "The Winter Goddess" (see note 4), 154.

⁹⁷ Motz, "The Winter Goddess" (see note 4), 154. Cf. "Die wilde Jagd," *Wörterbuch der deutschen Volkskunde*, ed. Richard Beidl and Oswald A. Erich (1974: Stuttgart: Kröner, 1996).

⁹⁸ Rumpf, "Perchta in der Sage und der mittelalterlichen Quellen" (see note 73), 124.

⁹⁹ Carter, *Perchten and Krampusse* (see note 14), 909–910.

¹⁰⁰ Kellner, "Percht" (see note 2), 722.

mained especially connected to Bavaria as a prince-bishopric of the Holy Roman Empire until the fourteenth century. The Protestant Reformation (1517–1521) spurred centuries of religious and political conflict, with the Thirty Years' War (1618–1648) bringing devastation to these territories, especially the German countryside, and the Counter-Reformation (1545–1563) reclaiming Bavaria and Austria for Catholicism.¹⁰¹ Given the prevalence of religious conflict, we can better understand the struggle of Christian churches – the Catholic and protestant/Lutheran groups – to demonize deities like Perchta and Holda who were revered by the pagan natives.

Perchta as Punisher of Sinners and Children: Religious and Folkloric Adaptation and Assimilation

It seems that these groups eventually gave up on equating such deities with the devil, instead transforming them into punishers of sinners who were still quite horrifying. Grimm speculates that the iron features of “eisernen Bertha,” which are alluded to in nineteenth-century threats made to misbehaving children as well as these medieval sources, may have been related to the metal implements (knife, iron chain, and plowshare) she used to perform gastrotomy – but one may also speculate that such features could also connect Perchta to the traditional beliefs of the Iron Age, as I have mentioned. In his *Deutsche Mythologie* (1835), Jacob Grimm observes in the section on “Perahta” that the tale of a “Bertha” with a strange foot exists in Middle German (Berhte mit dem fuoze), French (Berthe au grand pied; Berta del gran pie), Latin, and Italian (perche ella aveva un pie un poco Maggio dell altro, e quello era il pie destro).¹⁰² Like Grimm himself, one can easily draw an association with the Devil's cloven hoof-feet. Grimm writes, “Es scheint der Fuß einer *schwanjungfrau*, den sie (wie Huldra den Schwanz, der Teufel den Pferdfuß) zum zeichen ihrer höheren Natur nicht ablegen kann, zugleich der Platschfuß der auftretenden Spinnerin und der stampfenden Frau Stempe oder Trempe. Hätten wir in Deutschland ältere, genauere Beschreibungen von ‘Frau Behrta’, vielleicht würde dann auch dieses Fußes erwähnt”¹⁰³ (It is appar-

¹⁰¹ Cf. Carter, *Perchten and Krampusse* (see note 14), 14.

¹⁰² Grimm, *Die Deutsche Mythologie* (see note 34), “Perahta,” 258.

¹⁰³ Grimm, *Die Deutsche Mythologie* (see note 34), “Perahta,” 258.

ently a swan maiden's foot, which as a mark of her higher nature she cannot lay aside . . . and at the same time the spinning-woman's splayfoot that worked the treadle.)¹⁰⁴

An interesting transformation occurs when Perchta appears in texts no longer simply as a leader of the Wild Hunt or a goddess of seasons who, according to authorities of the Church or to Martin Luther, should not be worshipped, but also as an elderly woman who seeks to punish those who have misbehaved. This seems to be a feature attributed by religious authorities, or storytellers more generally, who sought to adapt customs surrounding Perchta into Christian culture. As one might expect, to quote Leek, "from the point of view of Christian missionaries, pagan gods and devils are identical."¹⁰⁵ Leek notes that a "greater number of references to Frau Holle survive" from the fifteenth century than prior centuries, and that these are "mostly from clerics condemning her cult."¹⁰⁶ Johannes Herolt compares Holle not only to Perchta and Herodias but also to Diana in his *Sermones Discipuli* (ca. 1418) when "enumerating the many roads to perdition."¹⁰⁷ Herolt writes, "Decimi noni sunt, qui credunt, quod Diana, quae vulgariter dicitur frauberthe vel frauheilt vel die selige frawe, cum exercitu de nocte ambulat per multa spatia" ("Nineteen are those who believe, that Diana, who in the language of the people is called frauberthe [Frau Perchte] or frauheilt [Frau Holle] or die selige frawe [the blessed woman], travels great distances with an army by night").¹⁰⁸ This is an early reference to the wild hunt, and many follow in this century including Vintler's *Die Hy-melstrass* as previously mentioned. From being largely compared to Diana in the fifteenth century, Holda later becomes compared more frequently with Venus, first by Martin Luther, who is equally as disapproving as Catholic authorities.¹⁰⁹ In the same century, the peasant Arnold Buschmann had a vision of his uncle in which he was warned of folk spirits who live under the earth including "dy fraw hulden."¹¹⁰ At the same time that Perchta was condemned as a false deity, she began to take on a new identity as a figure of divine judgment.

According to religious and political authorities of the Middle Ages, Perchta would also punish bad children. In becoming a "spinning room mistress," Perchta

¹⁰⁴ Grimm, *Teutonic Mythologie* (see note 35), 273.

¹⁰⁵ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 320.

¹⁰⁶ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 317.

¹⁰⁷ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 317.

¹⁰⁸ Quoted in von Klapper, "Deutscher Volksglaube in Schlesien in ältester Zeit" (see note 58), 49.

¹⁰⁹ Martin Luther, *Werke: Kritische Gesamtausgabe*. Vol. 1 (Weimar: Hermann Böhlau, 1883). See also Lotte Motz's discussion of Luther's *Auslegung der Episteln*, "The Winter Goddess" (see note 4).

¹¹⁰ Baesecke, Georg. "Frau Holden am Niederrhein," *Zeitschrift des Vereins für Volkskunde* 22 (1912): 179–80.

and Holda's character was significantly transformed. Leek postulates that, "when Germans were converted, the continued veneration of Holda depended on a reinterpretation of values signified by her name."¹¹¹ Duke Friedrich (Frederick) of Bavaria wrote in 1375 of a belief found in the hills around Traunstein (southern Bavaria): "Perchtag wurde [. . .] an vielen Orten der heiligen drey Königen Tag genannt, und soll von einem fabulösen Gespenst herkommen, mit dem man am heiligen drey Königen Abend die Kinder bedrohte, dass das perche komme, die den Kindern den Bauch aufschneiden, wenn sie den Eltern ungehorsam seyn" ("Perch Day was . . . called the Holy Three Kings' Day in many places, and a fabulous ghost is supposed to come, with whom one threatens children on Holy Three Kings eve that the *perche* is coming, who cuts the bellies of children open when they do not mind their parents.")¹¹² After cutting open a child's stomach, she sometimes sews it up again with a horribly oversized instrument, such as an iron chain.¹¹³

As Sonja Rüttner-Cova writes, "The relatively late Christianization of the German peoples makes easier the investigation into the time when primarily the rural population lived for a long time according to the laws of the Great Goddess. Frau Holle, known as a character from a fairy tale, is one of the many motherly goddesses whose traces reach far into matriarchal history."¹¹⁴ The comparisons to Norse, Greek, Roman, and Egyptian goddesses share the matriarchal nature goddess commonality: Frau Perchta or Frau Holda is not only motherly but is Mother Earth embodied, and this is not commensurate with the complete embrace of Christ and God the Father as a patriarchal order.

Perchta's identity in society seems to follow currents in the human concept of nature at various points in this history. Maurice Merleau-Ponty writes, "Est Nature le primordial, c'est-à-dire le non-construit, le non-institué; d'où l'idée d'une éternité de la Nature (éternel retour), d'une solidité. La Nature est un objet énigmatique, un objet qui n'est pas tout à fait objet; elle n'est pas tout à fait devant nous. Elle est notre sol, non pas ce qui est devant, mais ce qui nous porte"¹¹⁵ ("Nature is the primordial – that is, the nonconstructed, the noninstituted; hence the idea of an eternity of nature (the eternal return), of a solidity. Nature is an enigmatic object, an object that is not an object at all; it is not really set out in front of

¹¹¹ Leek, "Holda: Between Folklore and Linguistics" (see note 36), 334.

¹¹² Quoted in Marianne Rumpf, *Perchten: Populäre Glaubensgestalten zwischen Mythos und Katechese*. Quellen und Forschungen zur europäischen Ethnologie, 12 (Würzburg: Königshausen & Neumann, 1991), 43.

¹¹³ Carter, *Perchten and Krampusse* (see note 14), 917.

¹¹⁴ Sonja Rüttner-Cova, *Frau Holle, die gestürzte Göttin: Märchen, Mythen, Matriarchat* (Basel: Sphinx, 1986), 12.

¹¹⁵ Merleau-Ponty, *La Nature* (see note 23), 20.

us. It is our soil [*soil*] – not what is in front of us, facing us, but rather, that which carries us”).¹¹⁶ But Merleau-Ponty also recognizes the limitations of nature as a human concept, as opposed to its independent form.

The idea of nature changed greatly from the Middle Ages to the early modern period: “C’est que la Nature reste encore étroite, à la mesure de l’homme. Avant le xvi siècle, on se borne à recopier Théophraste pour savoir le nombre des espèces. A fin du xvi siècle, on dénombre 1300 espèces; en 1682, John Ray en compte 1800”¹¹⁷ (“Nature still remains narrowly construed in proportion to man. Before the sixteenth century, we are limited to recopying Theophrastus in order to know the number of species. At the end of the sixteenth century, we count 1,300 species; by 1682, John Ray counted 18,000 of them”).¹¹⁸ Merleau-Ponty argues that nature remained defined according to Thomas Aquinas until René Descartes revised this idea: for Aquinas, “Il y aura deux philosophies de la Nature, l’une pour décrire la Nature, l’état de nature’ avant le péché, une autre pour après le péché, où le Bien et la Nature ne peuvent être posés ensemble”¹¹⁹ (“There will be two philosophies of Nature: one to describe nature, the ‘state of Nature’ before original sin, and another for after it, when the Good and Nature cannot be posited together”).¹²⁰ With Descartes, Nature externalizes God: “D’où il s’ensuit que la Nature est, à l’image de Dieu, sinon infinie du moins indéfinie; elle perd son intérieur; elle est la réalisation extérieure d’une rationalité qui est en Dieu”¹²¹ (“Nature, the image of God, is at least indefinite if not infinite. Nature loses its interior; it is the exterior realization of a rationality that is in God”).¹²² Furthermore, Nature as exteriority entails a system of laws.

Remnants of Perchta in Romanticism

Curiously (and perhaps not coincidentally), Perchta resurfaces in faux-medieval stories of German Romanticism. Frau Holle appears not only in Grimms’ *Deutsche Mythologie*, but also in the *Märchen* or fairy tales – an old woman with large teeth rewards and punishes a sister and her stepsister for hard work and laziness, respectively. Bertha is the name of the Christian heroine in de la Motte Fouqué’s

¹¹⁶ Merleau-Ponty, *Nature* (see note 23), 4.

¹¹⁷ Merleau-Ponty, *La Nature* (see note 23), 24.

¹¹⁸ Merleau-Ponty, *Nature* (see note 23), 7.

¹¹⁹ Merleau-Ponty, *La Nature* (see note 23), 26.

¹²⁰ Merleau-Ponty, *Nature* (see note 23), 10.

¹²¹ Merleau-Ponty, *La Nature* (see note 23), 27.

¹²² Merleau-Ponty, *Nature* (see note 23), 10.

Der Zauberring, in which all the pagans who don't die embrace Christianity. Bertha becomes a stand-in for the Virgin Mary, and her opposing figure, a pagan sorceress named Gerda, at one point impersonates a particularly militant version of Freia and has to be defeated by the Christians. In de la Motte Fouqué, Bertha's last name is von Lichtenried, which makes even more sense with the first name meaning the Bright One.

Bertha is also the name of the sister and love interest in Ludwig Tieck's *Eckbert the Blonde*, in which ultimately a witch returns to tell him of his wrongdoings; there is also the "Waldweib" in Tieck's *Der Runenberg* (1802/04). Richard Kimpel argues that the Venus-like woman who brings Christian gold and the ugly "Waldweib" are all manifestations of the same being in *Der Runenberg*.¹²³ Here, one must note that Perchta would have to be the inspiration for the beautiful and ugly duality, as well as the association with gold. Tieck's story reflects a widespread preservation of the ancient Germanic belief in a "guardian of the wild and its animals" – i.e., "the 'huldra' and the 'skogsrå' (ruler of the forest) of Norway and of Sweden, the 'Riesen' (giants) of northern Germany, the 'Holzleute' or 'Moo-sleute' of Franconia and Bavaria, the 'Waldweibchen' of the Upper Palatinate, the 'Lohjungfern' of the Harz, the 'Buschweiblein' of Thuringia and Saxony, the 'Wild-leute,' 'selige Fräulein,' and 'Fangen' of the Alps, who tend the goats, stags, or chamois native to the region."¹²⁴ Once again, there is a clear connection to Merleau-Ponty's understanding of humanity's historical relationship to nature and "Umwelt" (environment).

In Richard Wagner's *Tannhäuser* opera (1845), the shepherd boy sings a song to Frau Holda. *Tannhäuser* is an opera based on the *Minnesänger* and the medieval poet Tannhäuser as well as the Wartburg Song Contest of 1207. The opera is probably also influenced by texts from Tieck and Fouqué, as well as Heinrich Heine and Joseph von Eichendorff. In *Tannhäuser*, Holda, the Goddess of Spring, dwells at the Venusberg and becomes identified with Venus, the pagan Goddess of Love. It was said the goddess would lure the Wartburg minnesinger-knights to her lair with her beauty. In the third scene of the first act of Wagner's *Tannhäuser*, the shepherd boy sings a song to Frau Holda:

Frau Holda kam aus dem Berg hervor
Zu ziehn durch Fluren und Auen;
Gar süßen Klang vernahm da mein Ohr
Mein Auge begehrte zu schauen

¹²³ Richard W. Kimpel, "Nature, Quest and Reality in Tieck's *Der Blonde Eckbert* and *Der Runenberg*," *Studies in Romanticism* 9.3 (1970): 176–92.

¹²⁴ Motz, "The Winter Goddess" (see note 4), 158.

Da träumt' ich manchen holden Traum
 Und als mein Aug' erschlossen kaum
 Da strahlte warm die Sonnen
 Der Mai, der Mai war kommen
 Nun spiel ich lustig die Schalmei
 Der Mai ist da, der liebe Mai!¹²⁵

[Dame Holda stepped from the mountain's heart,
 To roam thro' wood and thro' meadow;
 Sweet sounds and low around me did start –
 I longed I might follow her shadow.
 And there dreamt I a golden dream,
 And when again the day did gleam
 The spell was gone that bound me:
 'Twas May, sweet May, around me.
 Now songs of joy attune my lay,
 For May hath come – the balmy May!¹²⁶]

It is significant that the first sound Tannhäuser hears after leaving the Venusberg is the Shepherd Boy's song to Lady Holda. The song of the shepherd outside the mountain parallels the songs of Tannhäuser within, as the boy sings of longing, of the mixture of dream and reality, and of the coming of the warmer season. Although Wagner's autobiography mentions that the first inspiration for his Tannhäuser opera was a sixteenth-century "Volksbuch" he stumbled across in Paris, the book seems to have actually been Ludwig Bechstein's *Die Sagen von Eisenach und der Wartburg, dem Hörseelberg und Reinhardsbrunn* of 1835.

Conclusion

The Romanticist remnants of Perchta or Frau Holda attest to a preserved folkloric tradition based on a figure who was at first worshipped, and then condemned; then transformed into a figure of judgment of sinners and of naughty children. Through all of these evocations of Perchta in ecclesiastical texts, folklore, and literature, one can sense a prehistoric impulse to venerate and even worship nature. While there are universalities shared with divinities including Greek and

¹²⁵ Richard Wagner, *Die Musikdramen* (Hamburg: Hoffmann und Campe, 1971), 228–29.

¹²⁶ Richard Wagner, *Tannhäuser: Opera in Three Acts* (1920; New York: Fred Rullman, Inc., 1920), 9.

Roman goddesses, Perchta and Holda has been shown to have a uniquely northern and central European identity.

Leek finds an early equating of Holda with Venus in Martin Luther, who, like Jacob Grimm later, describes a transformation of rubbish into precious metal.¹²⁷ Grimm directly connects Holda to springtime celebrations in Christian times, and even describes Holda as a motherly figure. Whereas Wotan led a mass of “furious spirits,” Huldana was the personification of graciousness, mercy and loyalty.¹²⁸ One notices of course the double aspect of Perchta’s character more generally, with dichotomies including night/day, winter/spring, wrath/mercy, and death/life. Around the Meissner area, the traditional belief is that Dame Holle controls the weather, especially fog and snow;¹²⁹ similarly, Baba-Percht of the Slovenic region sends the snows of winter.¹³⁰

Grimm also directly addresses the connection of shepherd boys and Holda.

Wie aber Holde in den *berg* gebannt ist, so sind es vorzüglich weißgekleidete jungfrauen, auf welche der begrif dieser bergverwünschung anwendung leidet: göttliche, halbgöttliche wesen des heidenthums, die den blicken der sterblichen noch zu bestimmter zeit sichtbar warden; am liebsten bei warmer sonne erscheinen sie armen schäfern und hirtensjungen. unsere volkssage ist allenthaben voll anmutiger erzählungen davon, die sich wesentlich gleichen und die festeste wurzel verrathen.¹³¹

[But as Holda is spell-bound in the mountain, so it is preeminently to *white women, white-robed maidens*, that this notion of mountain banishment becomes applicable: divine or semi-divine beings of heathenism, who still at appointed times grow visible to mortal sight; they love best to appear in warm sunlight to poor shepherds and herd-boys. German legend everywhere is full of graceful stories on the subject, which are all substantially alike, and betray great depth of root.]

In a discussion of the Venusberg legend, Grimm asserts that the shared identity of Venus and the German goddess Holda in these tales is placed beyond question. Wagnerians may recall that, in *Das Rheingold*, Freia is also referred to as Holde. By the transitive property, if Venus equals Holde and Holde equals Freya, Venus equals Freya. Grimm writes that the Hörselberg of Thuringia was still considered in the tenth through the fourteenth centuries to be the residence of the German goddess Holda and her host. In the “Hexenfahrt” in *Deutsche Mythologie*,

127 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 318.

128 Leek, “Holda: Between Folklore and Linguistics” (see note 36), 324.

129 Waschnitius, Percht, Holda und verwandte Gestalten (see note 5), 90.

130 Cf. Motz, “The Winter Goddess” (see note 4), 159.

131 Grimm, *Die Deutsche Mythologie* (see note 34), “Bergentrückung,” 914.

he describes legends of “nachtfrauen” or “night-women,” who fly through the air mounted on beasts.

We have now considered the dualities or *Doppelaspekte* of Frau Perchta or Frau Holda as both a beautiful goddess and an ugly witch, as an embodiment of the death of winter and of the warmth, fertility, and growth of spring. In pre-Christian tradition, both winter and spring were praised as beautiful seasons. Traditional beliefs in spirits who embodied nature reflected a way of life in which humans gave thanks to the Earth for its cycles of life and death. As religion sought to normalize customs through a common narrative, Perchta was adapted and evolved into a figure of folklore. Despite the wide range or typology of Perchtas and Holdas that followed, her inherent, original, natural properties have miraculously been preserved. We understand that her pagan origins reflect a concern “with the welfare of the Earth,”¹³² and that she personifies the forces of nature.

132 Carter, *Perchten and Krampusse* (see note 14), 18.

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Biographies of the Contributors

Fabian Alfie is a Professor of Italian at the University of Arizona who specializes in the comic / satiric literature of the Middle Ages and Renaissance. He has published extensively on the topic, including two monographs (*Comedy and Culture: Cecco Angiolieri and Late Medieval Society* [Leeds: Northern Universities Press, 2002] and *Dante's Tenzon with Forese Donati: The Reprehension of Vice* [Toronto: University of Toronto Press, 2011]), and numerous articles and book chapters. Along with Nicolino Applauso, he is co-editor of *Dante Satiro: Satire in Dante Alighieri's Comedy and Other Works* (Lanham, MD: Lexington Books 2020). Additionally, he has published book-length translations of Rustico Filippi, Folgore da San Gimignano, and Domenico di Giovanni nicknamed Burchiello (co-authored with Aileen Astorga Feng). His most recent work is a critical edition of a manuscript of a satire of the High Renaissance (*La Cazzaria, Manoscritto K: da una copia ottocentesca dell'Edizione di Napoli (ca. 15230)* [Florence: Franco Cesati Editore, 2022]).

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GKS 1663 4^o. Edition und Kommentar, 2017; and a series of articles published in journals such as *Linguistica e Filologia* 33, 2013; *Filologia germanica – Germanic Philology* 6, 2014; and in volumes such as *Words across History: Advances in Historical Lexicography and Lexicology*, ed. M. V. Domínguez-Rodríguez, 2016; *Medieval German Tristan and Trojan War Stories: Interpretations, Interpolations, and Adaptations*, ed. S. Jefferis, 2017; *Bodily and Spiritual Hygiene in Medieval and Early Modern Literature. Explorations of Textual Presentations of Filth and Water*, ed. A. Classen, 2017; *Languages for Specific Purposes in History*, ed. N. Monnier, 2018; *Literature, Science and Religion: Textual Transmission and Translation in Medieval and Early Modern Europe*, ed. M. Bellmunt Serrano and J. Mihiques Climent, 2020). She has also the interest in charms and blessings, which are often included in medical compendia (*Mittelniederdeutsche Segen und Beschwörungsformeln in medizinischem Überlieferungskontext: Korpus und Analyse*, 2021). Currently her main research interest is constituted by the Germanic vernacular reception of Lanfranc of Milan's surgical works (essays appeared in *Mediaevistik* 35, 2022, as well as in *Globalism and Meeting Foreign Worlds in the Pre-Modern Era*, ed. A. Classen, 2023).

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Albrecht Classen is University Distinguished Professor of German Studies at The University of Arizona. He has published currently hundred and twenty-seventeen books, most recently *The Forest in Medieval German Literature* (2015), *Water in Medieval Literature* (2018), *Toleration and Tolerance in Medieval and Early Modern European Literature* (2018), *Travel, Time, and Space in the Middle Ages and Early Modern Time* (ed., 2018), *Prostitution in Medieval Literature* (2019), *Charlemagne in Medieval German and Dutch Literature* (2021), and *Freedom, Imprisonment, and Slavery* (2021; *The Literary Encyclopedia* book prize for 2023), and *Wisdom in the Middle Ages* (2022). His latest monograph focused on *Secrets in Medieval Literature* (2022), and a new one forthcoming deals with court criticism in medieval literature. Together with İrem Atasoy, and Barış Konukman, he edited *Turkish-German Relations in Literary History from the Fifteenth Through the Twenty-First Century – Deutsch-türkische Beziehungen in der Literaturgeschichte vom 15. bis zum 21. Jahrhundert* (2023), and he also edited the

volume *Globalism in the Middle Ages and Early Modern Age* (2023). In 2004 the German government awarded him with the *Bundesverdienstkreuz am Band* (Order of Merit), its highest civilian award. In 2008 the University of Arizona bestowed upon him its highest award for research, the “Henry & Phyllis Koffler Award.” He has also received numerous teaching and service awards over the last three decades, such as the “Five Star Faculty Award” (2009) and the “Carnegie Foundation for the Advancement of Teaching 2012 Arizona Professor of the Year Award.” In 2021, he received the Chatfield Outstanding Tenured Researcher Award, COH, University of Arizona, and in 2022, the American Association of Teachers of German awarded him with its Honorary Membership. He is serving as editor of the journals *Mediaevistik* and *Humanities–Open Access, Online*, apart from several other online journals. In 2015 he received the Excellence in Academic Advising Faculty Advisor Award, followed by a Certificate of Merit from NACADA: The Global Community for Academic Advising. In 2016, friends and colleagues dedicated a *Festschrift* (*Mediaevistik* 28) to him on the occasion of his 60th birthday. In recognition of his accomplishments, he received the rank of Grand Knight Commander of the Most Noble Order of the Three Lions in 2017. In 2020, he received the DAAD AA (German Academic Exchange Program) Excellence Award in International Exchange. He also writes poetry (currently 12 vols.) and satires (currently 4 vols.), and he is also the President of the *Society of Contemporary American Literature in German* (SCALG) since 2020. In 2021, he received the Tulliola-Renato Filippelli Award for his satires, and he earned the College of Humanities Distinguished Research Award in 2022. The American Association of Teachers of German (AATG) bestowed the title of Honorary Member on him in 2022. In 2023, his book *Freedom, Imprisonment, and Slavery in the Pre-Modern World* (2021) gained the first prize by the *Literary Encyclopedia* (joint winner).

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Knowledge: Science on Public Display in the Holy Cross Parish Church at Schwäbisch Gmünd,” *Nuncius* 33 (2018): 25–55. She also contributed to *Travel, Time, and Space in the Middle-Ages and Early Modern Time*, ed. Albrecht Classen (2018), to *Mediaevistik* 34 (2021), and to *Sixteenth Century Journal* 55.4 (2024).

Filip Hrbek is a Ph.D. student and lecturer at the History Department of the Jan Evangelista Purkyně University in Ústí nad Labem, the Czech Republic. He received his B.A. and M.A. also there. In 2014 he received the Zdeněk Horský Award from the Society for the History of Sciences and Technology for his diploma thesis “Doctors, ‘Prelates’ and Humanists – Plague Disease in the Treaties of Pre-Thirty Years’ War Bohemia.” He teaches Czech medieval history, the historiography, and the history of medicine in the Middle Ages and early modern period. Apart from that, his research interests include the history of mentalities, the regional history, and the history of Czech-German relationships. He co-edited a publication focused on the history of corruption and clientelism (Michaela Hrubá, Filip Hrbek and Jiří Myroniuk, 2024). He recently also published a study dealing with the question of (immoderate) consumption of wine in early modern Czech lands (2024), and a study focused on the history of burghers’ brewery in Litoměřice (Leitmeritz) in a collection dedicated to the history and challenges of modern brewing industry (2024). He is also the co-author of a book dealing with the history of “The House with Chalice,” a local sixteenth-century monument representing local wine production and trade (Kamil Podroužek, Filip Hrbek, Jan Peer and Jan Horák, 2024).

William Mahan is an Assistant Professor of German at Northern Arizona University. William’s current research is focused on subversive figures in German literature and film – from medieval rogues, bandits, and vagrants, to the computer hacker (called the modern-day Robin Hood by Steven Levy) in German film and television, as is the focus of his book project *Hackers as Heroes in German Film and Television*. His recent publication, entitled “Ghostly Letters: The Legacies of Death Letters in Schnitzler’s Narratives,” appeared in the fourth issue of *German Quarterly* for 2021. His research focuses more broadly on “ghost” figures in German and Austrian film and literature that represent the haunting imposition of Europe’s violent history on its contemporary moment. He currently has a chapter in the works on the German TV series *Dark*.

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Fiero, Wendy Pfeffer, and Mathé Allain (1989), *Proverbs in Medieval Occitan Literature* (1997), *Songs of the Women Trouvères*, edited by Eglal Doss-Quinby, Joan T. Grimbert, Wendy Pfeffer, and Elizabeth Aubrey (2001), “*Chançon legiere a chanter*”: *Essays on Old French Literature in Honor of Samuel N. Rosenberg*, edited by Karen Fresco and Wendy Pfeffer (2007), *Bibliographie de la littérature occitane: trente années d'études (1977–2007)*, together with Robert A. Taylor (2011), *Nouvelles recherches en domaine occitan: Approches interdisciplinaires. Colloque de l'Association internationale d'études occitanes, Albi, 11 & 12 juin 2009*, edited by Wendy Pfeffer and Jean Thomas (2015), *Le Festin du troubadour: La nourriture, la société et la littérature médiévale en Occitanie, 1100–1500* (2016), and, most recently, Blandin de Cornoalha: *A Comic Occitan Analogue to Sleeping Beauty*, edited by Wendy Pfeffer, translated by Margaret Burrell (2022). Her articles cover topics ranging from Dante's *De vulgari eloquentia* to medieval French and Occitan lyric to 18th-century reception of troubadour lyric to contemporary French popular culture. Pfeffer has twice been awarded a Fulbright Research fellowship for work in France, in Toulouse (2011) and in Tours (2018). She has served as editor-in-chief of the scholarly journal *Tenso* since its founding in 1985. The University of Louisville awarded her its Presidential Award for Distinguished Service to the Profession in 2005 and its Distinguished Faculty Award of Outstanding Scholarship, Research and Creative Activity in 2017. In recognition of her work promoting Occitan language and literature, the French government has recognized her, first as a knight (2005), and then as an officer (2012) in its Ordre des Arts et des lettres. The Association internationale d'études occitanes has named her an Honorary Member (2023).

John Pizer is Professor of German and Comparative Literature at Louisiana State University, Baton Rouge. He is the author of six books and some eighty articles and book chapters. His area of specialty is 18th–21st century German literature and thought, with occasional forays into the Baroque and Comparative Literature. His most recent articles include: “Herder und Wolfgang Menzel,” *Herder und das 19. Jahrhundert*, ed. Liisa Steinby (Heidelberg: Synchron, 2020), 229–40; “Dream and Prophetic Projection in Andreas Gryphius's Historical Tragedies: Traces of the Symbol,” *Imagination and Fantasy in the Middle Ages and Early Modern Time: Projections, Dreams, Monsters, and Illusions*, ed. Albrecht Classen (Berlin: Walter de Gruyter, 2020), 711–35; “Goethe's World Literature Paradigm: From Uneasy Cosmopolitanism to Literary Modernism.” *A Companion to World Literature. Volume 4: 1771 to 1919*, ed. Ken Seigneurie, Frieda Ekotto and Abigail E. Celis (Hoboken, NJ: Wiley Blackwell, 2020), 2169–79, and “Teaching the French Revolution in Late-Eighteenth and Early-Nineteenth Century German Literature Classes,” *Teaching Representations of the French Revolution*, ed. Julia Douthwaite Viglione, Antoinette Sol, and Catriona Seth (New York: MLA, 2019), 296–304. His most recent book, *Ambivalent Literary Farewells to the German Democratic Republic*, was published by Walter de Gruyter in 2021. This work examines dissatisfaction with the process of German reunification and its aftermath as expressed in imaginative literature from shortly after the dissolution of the German Democratic Republic to the present day.

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Thomas Willard is Emeritus Professor of English at the University of Arizona, where he won awards for academic advising, student mentoring, and program planning. He has written extensively on the literature of esotericism, culminating in the recent study *Thomas Vaughan and the Rosicrucian Revival in Britain* (2024). Earlier publications include his edition of Jean d'Espagnet's *Enchiridion Physicae Restitutae* and *Arcanum Hermeticum* in English translation (1999; reprinted 2019) and introductions to separate reissues of these alchemical texts (2023 and 2024). In addition, he coedited *Visionary Poetics: Essays on the Criticism of Northrop Frye* (1991) and contributed chapters to several other volumes about Frye, most recently *Reeducating the Imagination* (2015). He wrote chapters for two volumes of *Theophrastus Paracelsus Studien* edited by Albrecht Classen (2011–2012) and revised the second essay as the lead article in a 2021 issue of *Psychological Perspectives: A Quarterly Journal of Jungian Thought*. He has also contributed to earlier volumes of Dr. Classen's *Fundamentals of Medieval and Early Modern Culture* (2010–2023).

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